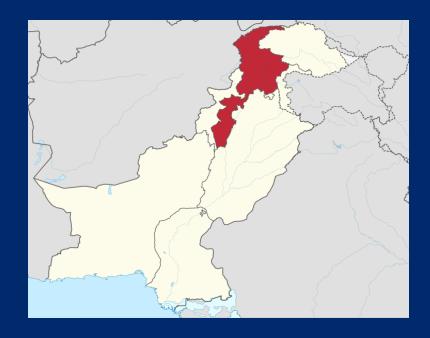




USAID FIRMS PROJECT

Legislative Frameworks for Health Sector of Khyber Pakhtunkhwa

Literature Review



July 2014

This publication was produced for review by the USAID. It was prepared by Contech International Health Consultants for an assignment commissioned by Chemonics International under the USAID Firms Project.





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Abstract

This report provides a review of existing laws, acts, and legislative frameworks currently governing the health sector of Khyber Pakhtunkhwa. Under this review, all these legislative frameworks were described in terms of their scope, implementation status, institutional frameworks, and any gaps in context of addressing the performance of health sector. An important aspect of this review is the comprehensive review of global literature to identify the best practices regarding legislative frameworks for improving health care service delivery. In review of these best practices, recommendations have been proposed to bring improvement in the performance of KP's health system.

Acronyms

AYUSH Ayurveda, Yoga, Unani, Siddha and Homeopathy

CCGs Clinical Commissioning Groups

CDS Comprehensive Development Strategy

CEO Chief Executive Officer

CHITS Community Health Information Tracking System

CMS Centers for Medicare and Medicaid Services

EGS Economic Growth Strategy

EHR Electronic Health Record

GPs General Practitioners'

HA Hospital Autonomy

HISs Healthcare Information Systems

HIT Health Information Technology

HRA Health Regulatory Authority

HRH Human Resource for Health

HRM Human Resource Management

IAS Indian Administrative Service

IBSS Insituto Boliviano de Seguridad Social

IDS Integrated Development Strategy

IMR Infant Mortality Rate

IPHS Indian Public Health Standards

IQWiG Institute for Quality and Efficiency

IT Information Technology

KP Khyber Pakhtunkhwa

LHUs Local health units

MDGs Millennium Development Goals

MOH Ministry of Health

MoHCW Ministry of Health and Child Welfare

MTDF Medium Term Development Framework

NABH National Accreditation Board for Hospitals and Healthcare Providers

NHS National Health Service

NIH National Institute of Health

NWFP North West Frontier Province

PCNA Post-Conflict Needs Assessment

PDHS Pakistan Demographic and Health Survey

PGMI Postgraduate Medical Institute

PHI Private Health Insurance
PPPs Public-Private Partnerships

PRSP Poverty Reduction Strategy Paper

SHI Statutory Health Insurers
TMOs Trainee Medical Officers

UK United Kingdom

USAID United States Agency for International Development

USHHS U.S. Department of Health and Human Services

USTDA U.S. Trade and Development Agency

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Executive Summary

Health outcomes of KP's population are reflective of a highly inadequate healthcare delivery system. Overall, the health status of the provincial population and the management of the provision of health services have failed to register any significant improvement over the many years since the adoption of the MDGs. The state provision of health services fares poorly in terms of its efficiency, effectiveness and the extent of the coverage of the poor population. People living in remote areas cannot access health services due to the non-availability of such services near their localities. Poverty increases with disease and illness, as income opportunities are lost. Government has realigned development priorities to provide social services, with health and education as top priorities, and further aims to address deficiencies in the healthcare system, improve management at the facility and supervisory levels through a multi-dimensional but integrated approach.

Currently developed Integrated Development Strategy 2014-2018 unveils the government's priorities for delivery of fundamental rights and privileges of people by establishing a transparent, corruption-free system of governance and to ensure a secure society. The IDS will be the government's main vehicle to improve human development and remove inequities, thus creating prosperity for all. An important aspect of the reforms agenda is development of required legislative frameworks and strengthening of existing ones through institutional arrangements and development of their implementation frameworks.

This report provides a review of existing laws, legislations, rules and regulations governing the health sector of Khyber Pakhtunkhwa. This review further identify and describe global best practices of legislative frameworks that have resulted in improved performance of health system and accordingly, provide recommendation to address the gaps and weaknesses in legislative and implementation frameworks of health sector of KP.

Although there are pertinent Ordinances and Acts governing the health sector of KP, implementation of these legislations still seems a distant reality. The existence of number of autonomous bodies e.g. Health Regulatory Authority, Health Foundation and teaching hospitals set up under the legislative acts of the provincial assembly may be evidence of legislations turning into reality but their role in improving health sector performance and quality of health service delivery remains a question mark due to limited scope and capacity. The review of laws, acts and ordinances governing the health sector suggest that they may be responsive towards prevalent health situation in KP, but it is witnessed that without the impetus of turning these legislations into implementation frameworks, their effect on actually changing health indicators and bringing in quality healthcare remains to be restricted.

Globally the countries with strong and thorough healthcare legislative frameworks like France, Italy, UK, & Germany have been successful in implementing their health care systems on firm grounds, while the developing countries like in Africa and Asia have healthcare legislations but lack of vigilant implementing system make their healthcare systems ineffective. Partial autonomy to health institutes has been the main concern in provision of appropriate healthcare facilities in developing countries as political and government influence creates interference in proper functioning of health institutes. Today it's the era of IT & globalization and pacing up with new era the developed countries have structured an up-to-date and efficient Health Information System e.g. Health Information Management System in United Kingdom for maintaining health sector data and providing prompt medical facilities to patients. Public-Private Partnership constructively engages the private sector in providing essential health-care services. PPPs,

when appropriately structured and executed, help address specific cost and investment challenges, deliver improvements in efficiency (e.g., improved service provision and management at reduced costs), and enhance service quality.

1.0 Introduction

1.1 Context

The currently existing law and order situation and almost a decade long conflict have severely affected the Khyber Pakhtunkhwa (KP) province. During this time, the militant activities, and the counter-insurgency military operations have hampered the economic growth and social progress; and badly affected all aspects of life. As a result, similar to the other social sectors, health sector has also been severely hit by this situation. Physical infrastructure of health facilities has been badly damaged, and health care staff is hesitant in going to remote areas due to the security threats. This situation has increased the magnitude of problems, and caused disruption in service delivery as well. These two scenarios when coupled together with a service delivery system, which was already in urgent need of reform, have posed a serious challenge that demands immediate and effective response.¹

Health status of the province is reflected in the relatively poor health care indicators. According to Pakistan Demographic and Health Survey (PDHS) 2012-13, 60.5 percent women consulted a skilled healthcare provider for antenatal care; and this proportion was even lower in rural areas (55.9 percent). Among these, only 24 percent pregnant women had four antenatal checkups, as recommended by the WHO. Less than half (48.3 percent) deliveries in the province were conducted by a skilled birth attendant; and the situation was even worse in the rural areas of the province (44.1 percent). Furthermore, only 52.3 percent children in KP were fully immunized. The proportion of children who did not receive any vaccine was 12 percent, as compared to the national average of 5.4 percent.² The health indicators of districts directly affected by the ongoing conflict present an even worse situation.³

The outcomes of KPK health sector depict inadequate healthcare delivery system in the province. Good health is a fundamental right of every individual and vital for poverty reduction. Poverty and bad health are inseparable. Bad health is perceived both as a cause of increased poverty and as an obstacle to escaping it. It leads to reduced household savings; lower learning ability, reduced productivity and a diminishing quality of life, thereby creating or perpetuating poverty. With high rate of population growth, high illiteracy and high poverty rate of 39 percent, KP is experiencing sharp increases in disease prevalence.

In KPK, the quality and level of health service provision is poor in public sector medical facilities. It causes households to either incur significant out-of-pocket expenditure on health. The ratio of out of pocket expenditure on health in KPK remains at 76.6%, which is the highest in Pakistan. People living in remote areas of the province do not have access to primary health care services within a distance of 10 km.

There exist some cultural barriers hindering the access of women to medical facilities including considering it unnecessary, the cost, distance, lack of transport and not receiving permission from their family. On account of these barriers, women and children are particularly disadvantaged and deprived. Further factors contributing to poor health indicators in KPK include poor health and sanitation facilities, the education level of mothers, unemployment, low level of expenditures on health and the availability of basic health facilities. The said factors are though existent at national level too but the situation becomes grave with KPK specific factors like gender disparities, large scale internal population displacement and militant's attacks on health workers on vaccination campaigns.

The status of child and maternal health is not encouraging and the morbidity and mortality is high in the province. The rates of early childhood mortality are especially higher in rural areas. The reasons cited for which are low or no education and low-income level. Neonatal deaths are caused entirely by birth asphyxia, sepsis or prematurity while the reasons for deaths in the postneonatal period include diarrhea and pneumonia. The major causes of child deaths are diarrhea, pneumonia, injuries, measles and meningitis.

Immunization is important for reducing morbidity and mortality of children. In KPK, 64 % of children between the ages of 12 to 23 months are fully immunized. The rate of fully immunized children varies from one-third of the children in lowest income-group to over half in the upper most income group (Health Sector Situation Analysis). As per the KPK IDS, the under-5 mortality rate and the infant mortality rate (IMR) for the province respectively stood at 75 and 63 in 2006/07.

Malnutrition especially in children under the age of five and pregnant and lactating women is causing problems like low birth weight due to poor maternal nutrition, protein energy malnutrition and anemia. Inadequate intake of essential nutrients over a period of time leads to a deficiency of micronutrients, seriously affecting metabolic processes and resulting in malnourishment. Infectious diseases such as respiratory and intestinal infection cause a large number of deaths of children under-five in Pakistan with malnutrition being an aggravating factor.

1.2 Strategic Directions in KP's Health Sector

In the past, Khyber Pakhtunkhwa developed a Comprehensive Development Strategy (CDS) focusing on all the social sectors. The vision of CDS is attaining a secure, just and prosperous society through socio-economic and human resource development, creation of equal opportunities, good governance and optimal utilization of resources in a sustainable manner. The CDS outlines goals, strategies and priority programs for all sectors. The strategy for the health sector based on the strategic directions and priorities of the CDS has been developed by the government in consultation with stakeholders. The strategy incorporates priorities reflected in; the draft National Health Policy (2010), national policies designed to achieve the health related MDG targets of 2015, the Medium Term Development Framework (MTDF), and the Poverty Reduction Strategy Paper (PRSP-II).

The current provincial government is committed to implementing a pro-poor, pro-people reform agenda to respond to the grievances of the public about the inadequacy of social services and pervasive misgovernance. In order to address these issues, the provincial government has recently developed Integrated Development Strategy 2014-18 (IDS) for delivery of fundamental rights and privileges of people by establishing a transparent, corruption-free system of governance and to ensure a secure society. The IDS will be the government's main vehicle to improve human development and remove inequities, thus creating prosperity for all.

The IDS truly integrated government priorities under one framework. The earlier development strategies and assessment of government, such as the Comprehensive Development Strategy (CDS), the Economic Growth Strategy (EGS) and the Post-Conflict Needs Assessment (PCNA) have all been consolidated in the IDS. According to the IDS, the health status of the provincial population and the management of the provision of health services have failed to register any significant improvement over the years since the adoption of the MDGs.

1.2.1 Key Challenges and Proposed Reforms

The health sector is facing multitude of challenges ranging from ongoing conflict and extremist propaganda against immunization inhibiting public health activities to poor governance and week regulatory framework leading to insufficient service delivery. Further, there is limited availability of skilled workforce, weak monitoring and internal control system. As per IDS, the provincial government aims to address deficiencies in the healthcare system, improve management at the facility and supervisory levels through multi-dimensional but integrated approach. Key elements of the government's health care strategy include:

- A focus on maternal and child health care and coverage of critical illnesses
- Improving governance through restructuring if required, and upgrading Basic Health Units, Rural Health Centers, and Tehsil Headquarter Hospitals.
- Targeting of the districts with the lowest health indicators
- Revitalization of the Health Foundation

These strategic interventions of the sector reflect the prioritizing of equitable access to quality health care facilities and reductions in the incidence of diseases. High importance is given to preventive, promotive, curative and rehabilitative health care through better coordination of healthcare service delivery.

1.2.2 Institution Building Measures in KP

Institution building measures in health care cover a host of health-related legislation, including the Health Foundation Act, Health Regulatory Authority Act, the Medical and Health Institution Reform Act, and the Food Security Authority Act. Currently, these acts are at different stages of formulation and approval. A key challenge after the enactment is the implementation of these acts. Further, the government is establishing an internal audit cell within the health department and a monitoring unit will be formed under this cell. Further, development of Knowledge Management Units, need-based knowledge and skill building, quality standards for various staff categories will be implemented for institution building of health sector.

2.0 Review Methodology

2.1 Purpose of the Review

This review is conducted with an overarching goal of assisting Department of Health, Government of Khyber Pakhtunkhwa to achieve its commitment of implementing a pro-poor, pro-people reform agenda to respond the inadequacy of social services, specifically health sector. This review will also lead to improve the health situation of the province through provision of quality health services in an equitable and sustained manner.

All the documents related to health sector's policy, strategy, legislation, rules and regulations, and their institutional frameworks for implementation will be reviewed. This will help developing broad outlines and specific implementation frameworks at the policy, strategy and institutional level of KP.

2.2 Objectives

Objective of this review is to facilitate the health department in assessing gaps in the existing framework (policies, laws and regulations) to enable its fair, efficient and growth-oriented functioning. Specific objectives of this review are to:

- examine the background material governing the KPK health sector including laws, policies, rules and regulations,
- review the legislation and policy documents of national and provincial health departments
- conduct stakeholders consultation,
- review the international best practices in health sector and choose 2 best practices from different continents, and to
- identify the deficiencies and gaps existent in the health sector of KP health sector in comparison with the international best practice.

2.3 Literature Search

An extensive and thorough literature search is undertaken. During this literature search, documents related to all the rules and regulations governing the health sector in KP have been retrieved. Further, frameworks in other provinces of the country and relevant documents from global best practices have been collected to compare and contrast them with rules and regulations of KP Health Sector so that deficiencies and gaps can be identified and bridged to achieve the desired health outcomes.

The documents in the collected resource have been categorized under the following groups:

- a. Legislation, Act and Ordinances
- b. Rules and Regulations
- c. Policy and strategy
- d. Service delivery standards
- e. Miscellaneous

Each legislative framework was reviewed to provide its scope and description; current level of implementation; institutional framework for the implementation; comparison with similar legislative frameworks in other provinces of the country; and identification of gaps, distortions, and weaknesses in each of the framework.

2.4 Stakeholders Consultation

Consultations with key stakeholders in the province are also undertaken to obtain in-depth understanding about the key issues related to health sector, especially with regard to the rules and regulations governing the health system. Initially, consultations have been conducted with USAID FIRM's representatives including their components leads, deputy lead. Later on, consultations with provincial health leaders have been carried out. Objective of these consultations was to build consensus around the approach and identifying the priorities and requirements of the policy makers and planners of provincial health department as well as Health Sector Research and Reform Unit.

2.4.1 Instruments for Consultation

In order to make the consultations uniform and standardized, qualitative interview guide was developed. This guide mainly covered the current scenario of KP's health sector regarding the status of legislative frameworks currently being implemented in the province. It further included queries regarding building the consensus with provincial health leaders of KP and identifying their expectations with this technical assistance.

2.5 Limitations of the Review

This review has attempted to comprehensively cover all the rules, regulations, and legislative frameworks that govern the health sector of Khyber Pakhtunkhwa. At the time of review, a number of legislations were under revisions or drafting, which posed challenge on their inclusion in this review. However, attempts were made to obtain all the draft legislations that were in the process of enactment so that the review incorporates the recent advancements.

3.0 Results & Findings

Following paragraphs provides the results and findings of this review. At first step, all the legislative frameworks governing the health sector of KP are described. After the description of these legislations, global literature is described to identify the best practices to overcome the gaps and deficiencies in the legislative frameworks of health sector of KP.

3.1 Legislative Frameworks for Health Sector of KP

All the acts and legislations covered in this review have been appraised regarding the building block of health system affected by the legislation, their scope, implementation status, description of institutional frameworks for implementation, and its key strengths and weakness regarding effects on performance of health care delivery system.

Sr. No.	KPK Health related Laws, Rules, Regulations, Ordinances and Acts
1.	KP Medical & Health Institutions and Regulations of Healthcare Services Ordinance 2002
2.	KP Medical & Health Institutions and Regulation of Healthcare Services Amendment Act 2006
3.	NWFP Private Medical Institutions Ordinance 1984
4.	NWFP Private Medical Institutions Amendment Ordinance 1985
5.	NWFP Private Medical Institutions (Registration) Rules, 1984
6.	Medical Attendance Rules 1990
7.	Rules of Business Govt. of NWFP 1985
8.	NWFP Procurement Goods, Works and Services Rules 2003
9.	KP Appointment, Deputation, Posting and Transfer of Doctors Regulatory Act 2011
10.	Teaching Cadre Rules 2007
11.	KP Health (Management) Service Rules 2008
12.	NWFP Medical and Health Institutions Reforms Ordinance 1999

3.1.1 NWFP MEDICAL HEALTH INSTITUTIONS AND REGULATION OF HEALTHCARE SERVICES ORDINANCE, 2002:

This Ordinance was promulgated in the year 2002 in order to regulate medical and health public institutions as well as private practice of medical practitioners, surgeons and other related staff inclusive of services provided by private hospitals, nursing/maternity homes, medical, dental and x-ray clinics, laboratories and blood banks owned by private entities other than the Government. The Ordinance covered the entire province of North West Frontier Province, applying to private and public institutions, practitioners and other institutions as Government may established or may have established under the North West Frontier Province Medical and Health institutions Reform Act 1999. Main objective of the Ordinance was to expedite

establishment and improvement of medical/health institutions, giving them an autonomous status for providing quality healthcare to the people of NWFP. The Ordinance also supported provision of medical education training in NWFP.

The Ordinance opined appointment of a Management Council consisting of members from the medical institutions, persons nominated by Government and other co-opt members for administrating and managing the affairs of a medical institution. The management committee was required to make rules, or as the case may be regulations in the exercise of its powers or performance of its duties.

This Ordinance laid foundation for **Health Regulatory Authority with the following functions** and objectives:

- 1. To register Private Health Institutions;
- 2. To monitor institutional private practice through concerned Management Council;
- 3. To set standards for establishment of facilities for clinical care, health institutions, medical institutions (private and public) under rules and laws defined in Government and private sector;
- 4. To develop standards for provision of preventive, promotive, curative, re-habilitative, environmental and occupational health as well as to regulate practice of traditional medicines including Ayurveda, homeopathic Tibb, etc. on modern scientific lines;
- 5. To standardize practice of medical, dentistry, nursing and paramedical profession through issuance of permits and licenses for practices to the same;
- 6. To tackle and decide cases of mal-practice or violation of standards in the private sector with a view to safeguard patient's rights to good health; and
- 7. To review and revise standards periodically in accordance with national and international best practices.

This Ordinance particularly focused on the notion that no private Health Institution would be allowed to be established or run unless it was registered with the regulatory Authority and holding a valid certificate issued by such authority. The contravention of any of the provisions of this Ordinance was made a punishable but bailable offense requiring imprisonment up to six months or/with fine extending to one million rupees.

With the notification of this Ordinance of 2002, the Ordinances of Private Medical Institutions (Regulation of Services) 1984 (N.W.F.P Ord. No. VII of 1984) and the Medical and Health Institutions Reforms Act, 1999 (N.W.F.P Act No. XII of 1999) were repealed.

3.1.2 KP MEDICAL & HEALTH INSTITUTIONS AND REGULATION AMENDMENT ACT 2006

This Act made promulgated in the year 2006 to make few amendments to Ordinance of NWFP Medical Health Institutions and Regulation of Healthcare Services, 2002.

Following were the significant amendments made through notification of this Act:

1. The term Authority used in the Ordinance was particularly defined as 'Health Regulatory Authority':

- 2. The Act re-defined the minimum qualification requirements of members of Management Council particularly, representative from Health, Finance and Establishment department selected as member of Management Council would not be below the rank of Deputy Secretary;
- The amended Act opined that contractual employees appointed by Management Council
 would be eligible for same benefits of contributory plans as regular employees of
 concerned medical institutions however they would cease to be Civil Servants after their
 appointment;
- 4. The amended Act provided the Health Regulatory Authority (HRA) the powers to acquire, hold and dispose of immovable property, however only with the prior approval of the Government:
- The Act also defined the mechanism of Administration of HRA where it entailed:
 - Allowing the HRA to engage any consultant, advisor or expert according to its needs/requirements
 - b. Establishment of a fund to meet expenses of HRA involving funds from Government sanctioned seed money, fees collected from issuance of licenses and registration certificates, grants by Government or Foreign Aid, loan sanctioned with approval from Government or any funds received by HRA through any other source.
 - c. HRA being subjected to audit, requiring maintaining complete and accurate book of accounts.
- 6. One of the main amendments promulgated in the Act of 2006 was the redefining of punishment from six months maximum to seven years in case of any contravention of provisions of Ordinance of 2002. It also amended the offense as non-bailable and cognizable, giving authority to HRA locking or sealing any private health institution if found to be working in contravention of any provision of Ordinance 2002.
- 7. Some of the other amendments made to Ordinance of 2002 included defining of:
 - a. Location of principal office at Peshawar and sub-offices at other places;
 - b. Three-year term of chairperson and members of HRA with eligibility for being appointed for another term;
 - c. Presiding mechanism in case of absence of chairperson;
 - d. Requirement of presence of one-third of members for meeting quorum and voting of majority for all decisions;
 - e. Delegation of powers by HRA to Chairperson of any other member except that relating to granting, suspending, revoking or canceling of registration certificates;
 - f. Remuneration/allowances allowed to members of Management Council subject to Government's decision.

3.1.3 NWFP MEDICAL INSTITUTIONS (REGULATION OF SERVICE) ORDINANCE, 1984

This Ordinance was promulgated to regulate services being rendered by private hospitals, nursing homes, medical, dental and x-ray clinics and clinical laboratories along with other

related ancillaries in the North-West Frontier Province. The Ordinance catered to whole of the province. This Ordinance particularly focused on registration of private medical institutions. The Ordinance opined that no private medical institution or blood bank would be established or allowed to continue unless registered and holding a valid certificate issued by the Registering Authority defined as 'an officer or authority appointed by Government'. This Ordinance specifically defined the qualification requirements of persons allowed to establish or run a private medical institution. It particularly mentioned age, solvency, maintenance of prescribed standards of service etc. i.e. that no minor, bankrupt or person found to be of unsound mind or guilty of criminal misappropriation would be allowed to run/establish a private medical institution. The Ordinance also laid down certain parameters for being registered where it was defined that no private medical institution would be registered unless it maintained a certain required standard and equipped with specific number/type of staff, services and amenities.

The Ordinance described the complete mechanism and process of registration of private medical institution, duration of certificate of registration i.e. one year, renewal of registration i.e. annually and cancellation/suspension of registration i.e. in case of breach of any conditions or contravening any provisions of this Ordinance.

Under the Ordinance 1984, contravention of any of the provisions of this Ordinance was kept bailable/without cognizance and punishable with simple imprisonment extending to six months and/or with fines extending to twenty-five thousand rupees.

3.1.4 NWFP PRIVATE MEDICAL INSTITUTIONS (REGULATIONS OF SERVICES) (AMENDMENT) ORDINANCE, 1985

This Ordinance was promulgated to amend the North-West Frontier Province Private Medical Institutions (Regulation of Services) Ordinance, 1984. It redefined the period without which a private medical institution can function without registration i.e. from the earlier requirement of "period not exceeding ninety days", the same was substituted with "period as defined and notified by Government in the official Gazette".

3.1.5 NWFP PRIVATE MEDICAL INSTITUTIONS (REGISTRATION) RULES, 1984

The Rules were framed under the Ordinance of 1984 to provide registration requirements for private medical institutions by the Health Registration Authority. The Rules provided format of application for registration and for renewal of registration. The Rules clearly defined the process, fees and eligibility requirements for applicants applying for the registration. The Rules also covered the mechanism for cancellation and suspension of certificates under which the role of inspection team appointed by the Registration Authority was defined. The role of inspection team included inspection of premises and records maintained (i.e. at least of two years) by the registered entities and ensuring compliance of all prescribed rules and standards by the registered entities.

The fees for registration ranged from Rs. 100 to Rs. 600 for different categories/types of private medical institutions e.g. hospitals, nursing homes, medical/dental clinics, x-ray centers, clinical laboratories etc. whereas for renewal, fifty percent of registration fee was designated. The Rules particularly defined the requirements of each category of private medical institution for obtaining certificate of registration, which included requirements pertaining to accommodation, building, staff, personnel, their qualification, equipment and diagnostic facilities. Special focus was on

requirements related to equipment, staff, building, and accommodation with regards to blood bank, labor rooms, wards and operation theatres.

3.1.6 RULES OF BUSINESS GOVT. OF NWFP 1985

The Rules of Business for Government of KPK 1985 laid down requirements for composition of government departments, organization of departments, procedure for disposal of business, enforcement and interpretation of rules framed to carry on the departmental activities, departmental administration and establishment of provincial government departments, consultation procedures with different departments, relation with the provincial legislation and other functional aspects of the provincial government departments. The Rules of Business also defined procedures for passing and preparation of Bills, resolutions, motions and questions in the provincial Assembly.

The Rules of Business 1985 also defined the list of 26 departments and their attached departments with detailed description on distribution of business amongst departments.

In relation to Health Department i.e. the focus of our research, following key business areas were defined under the Department:

- 1. **Leadership and evidence-based direction setting for health sector** pertaining to health policy development, health sector reforms, planning, financing and budgeting.
- Health support and development entailing health promotion including education and community engagement; disease prevention/control of both communicable and noncommunicable diseases; occupational, mental and environmental health; curative and rehabilitative care covering all levels i.e. primary, secondary and tertiary levels and health related disaster preparedness.
- 3. **Health regulation and enforcement** with regards to health related personnel, facilities, services, medical device and technology, drugs control, quality assurance, food and sanitation.
- 4. Management support services including health HR planning, development and management involving quality medical/allied education, in-service and pre-service trainings; logistics and procurement; auditing and accounting; and legal services inclusive of medico-legal advice and formulation, review, amendment of laws related to Health Department.
- 5. **Monitoring and evaluation** involving creation of evidence through performance assessment, information/communication systems and health related research.
- 6. Coordination of health department with other ministries, departments, local/international partners.

3.1.7 MEDICAL ATTENDANCE RULES 1990

The Rules defined medical attendance particularly for the Government Servants. They applied on Government servants who had fallen ill. The Rules mainly focused on the type of treatment and health facilities/services made available to the Government Servants and their families by Government in case of illness.

The Rules also described parameters related to medical allowance, travelling allowance in case of medical attendance, process for claiming medical attendance and approval process for medical attendance.

3.1.8 NWFP PROCUREMENT GOODS, WORKS AND SERVICES RULES 2003

These Rules mainly pertain to procurement of goods, works, services and consulting services. These Rules were defined under the KP Procurement of Goods, Works, Services and Consulting Services Ordinance of 2002. The Rules described the general conditions for procurement with public funds whereas exceptions in applicability of these rules e.g. in case of national calamities, emergencies, projects funded by foreign donors and international financial agencies were also defined explicitly.

The Rules of 2003 defined the role of Procuring Entity (i.e. Procuring Department) and discussed the mechanisms for (a) inviting and approving/accepting Tenders (b) registration of suppliers and contractors (c) Pre-and Post qualification requirements for suppliers and contractors (c) disqualification and disbarment of suppliers and contractors and (d) inducement from contractors/suppliers.

The second section of the Rules 2003 clearly defined the step-by-step proceedings for inviting tenders for pre and post qualification i.e. instructions on preparing and submitting tenders as per requirements. Details entailed (a) contents of invitations, (b) furnishing of earnest money (i.e. 2 percentage of estimated cost of procurement) and tender security (i.e. 10 percentage of bid price), and (c) supply of tender documents – method and requirements.

Under the third section, Rules 2003 explained the mechanism for receiving and opening tenders. The Rules defined place and time of receipt, method of marking covers, allowed minimum time for submission and process for tender opening. The fourth and fifth section pertained to tender evaluation process and process for accepting tenders. Under this section, the Rules 2003 laid down foundation for Tender Evaluation Committee, its working requirements, process for evaluating tenders including initial examination, identification of lowest evaluated price, preparation of evaluation report and ways of awarding tenders. Methods for rejecting tenders, returning earnest money/security, modes of procurement, negotiations were also adequately described in the Rules 2003.

The Rules 2003 therefore provided complete guidance for inviting, preparing, submission and acceptance of tenders.

3.1.9 KP APPOINTMENT, DEPUTATION, POSTING AND TRANSFER OF DOCTORS REGULATORY ACT 2011

The Regulatory Act of 2011 was promulgated to regulate by law appointments, postings and transfers at local level, of doctors in health facilities and to ensure the availability of doctors in health facilities established and managed by Government to provide medical facilities to general public, and to regulate deputation of doctors abroad.

The Act defined process of appointment of doctors on adhoc basis where Government had been allowed to make adhoc appointment on merit against the vacant posts of doctors falling within the purview of KP Public Service Commission. The Act opined that ad-hoc appointments must be in a district concerned from the domicile holders of that district for a period of one year or till the arrival of recommendees of Commission, whichever is earlier after fulfilling the prerequisites of giving wide publicity in the press. It was defined in the Act 2011 that on assumption

of charge of post by recommendee of the Commission, the services of such an ad hoc appointee would stand automatically terminated. Incase of non-availability of suitable and eligible candidate in the district, the candidates belonging to the neighboring districts were considered eligible for appointment in the order of their merit.

The Act defined the notion that post of a doctor proceeded on training or long leave would be treated as vacant post for the purpose of contract or contingent appointment till the return of such employee from training or long leave and assumption of charge of the post. The maximum duration of long leave considered to be vacant position was defined as not less than one year.

Initial posting mechanism was also explained in the Act 2011 where it was described that doctors upon their appointment must be first posted in the periphery of the zone against whose quota they were recruited for, and for a period not less than three years. Regulation Act for deputation of doctors was defined to be only once in the entire service and for a period not exceeding three years.

Postgraduate Medical Education requirements were also described in the Regulation Act 2011 which stated that the Health Department, on the basis of objective need assessment and analysis, would determine the intake number of Trainee Medical Officers (TMOs) in Postgraduate Medical Institute (PGMI) and Junior Registrars in Tertiary Care Hospitals annually and that any doctor selected or permitted for postgraduate medical training must be treated on leave without pay and entitled only for stipend fixed by Government from time to time for such training. The Act 2011 also defined the requirement of a surety bond, serving in districts for three years and provision of guarantee of two government officers as post-requisite for doctor selected or permitted for postgraduate medical training.

3.1.10 TEACHING CADRE RULES 2007

The Rules 2007 laid down the method of recruitment, qualification and other conditions applicable for the posts in medical colleges/institutions in KPK. The Rules provided complete description of posts in medical colleges/institutions in KPK, their required and approved minimum qualification and experience for appointment, age-limit and method for appointment along with any remarks.

3.1.11 KP HEALTH (MANAGEMENT) SERVICE RULES 2008

The Rules provide requirements for recruitment of health management cadre and the conditions of their service.

In case of recruitment, Schedule-I to the Rules provided number and nature of posts in BS 17-20; Schedule-II provided method of appointment, qualifications and other conditions to applicable to a post in the Service whereas Schedule-III provided syllabus and standard for examination for appointment by initial recruitment for BS-17.

The Rules 2008 defined the following **conditions of service**:

- Mandatory pre-service training for BS-17 officers had been kept for six months whereas the training required to be followed by departmental examination conducted by Provincial Health Services Academy as part of probation period.
- **Selection for in-service trainings** had been linked with promotion based on seniority basis where priority was given to those at verge of promotion.

- Private Practice was disallowed to all member of service however in lieu they were
 entitled to non-practicing allowance at a rate prescribed by Government. It was defined
 in the Rules 2008 that in case of default i.e. private practice, the member would be liable
 to disciplinary action under the law.
- It was explained in the Rules 2008 that Government, as one time exercise, would fill in posts in the Service described in Schedule-I by way of permanent transfer from amongst the Officers of General Cadre in equivalent basic pay scale with the qualification of Master of Public Health or Postgraduate Diploma in Public Health or Postgraduate Diploma in Hospital Administration or Health Planning & Management or equivalent Master's Degree/Diploma in Health management or allied disciplines and opt for absorption. The option once exercised would be final.
- The Rules opined that in case the number of officers opting for absorption in Management Cadre was more than the available positions in respective grade, the selection under one time exercise would be done on the basis of seniority-cum- merit only in the respective grade. The Rules 2008 also proposed consideration of additional relevant qualifications, trainings/courses in the relevant field and managerial experience for the same.

3.1.12 NWFP MEDICAL AND HEALTH INSTITUTIONS REFORMS ORDINANCE 1999

The establishment of medical and health institutions in KP and their autonomy is governed by the NWFP Medical and Health Institutions Reforms Ordinance 1999.

The Ordinance was framed to provide guidance for the establishment of Medical & Health Institutions in the KP province. The purpose of the Ordinance was to establish and improve Medical and Health Institutions and to give them an autonomous character in order to provide quality health care for the people of the province of KP.

The Ordinance applied to all Medical Institutions & Health Institutions as case of a Medical Institution or a Health Institution, which were already functioning on the commencing day of the Ordinance enforcement.

The salient sections of the Ordinance included:

1. Establishment of Institutions

The provincial Government was given the authority by notification in the official Gazette to establish Medical Institutions & Health Institutions or apply to existing the Ordinance, as it deemed necessary. The Ordinance allowed the medical institution to become a body corporate having perpetual succession and a common seal with power to acquire, hold and dispose of movable & immovable property and may by its name sue and be sued.

2. Objectives of the Institutions

The Ordinance permitted medical/health institutions to undertake all functions required for providing Medical Education, training and health facilities to the people and to perform such other functions as assigned to it by Government.

3. Administration

The Ordinance gave the administration & management of the affairs of the Medical Institution to a Management Committee appointed under the Ordinance. It was clearly defined in the Ordinance that the administration & management of the affairs of the Health Institution would be subject to general supervision and control of Government, vest in such body or authority as Government may appoint.

4. Management Committee

The Ordinance defined the composition of the Management Committee to administer and manage the affairs of a Medical Institution, consisting of Chief Executive as Chairman with Dean/Principal, Medical Superintendent, Director Finance & Departmental Grants Committee officer, 3-5 non-officials as Members nominated by Government.

5. Conduct of business

It was particularly defined in the Ordinance that all decisions of the Management Committee would be taken by majority of votes, with a casting vote option for Chairman in case of equal number of votes.

6. Management of the Medical Institution under the Ordinance 1999 was given to a whole time Chief Executive possessing qualification and on terms and conditions as determined by the Government, whereas for a **Health Institution**, the body or the authority appointed was given the mandate to administer and manage the affairs of a Health Institution in a manner as prescribed by Government.

7. Committees

In order to give effect to the provision of the Ordinance, Management Committee had been required to constitute following committees:

- (a) The Executive Committee
- (b) The Finance & Departmental Grants Committee
- (c) The Registration & Medical Ethics Committee
- (d) The Establishment & Medical Staff Committee
- (e) The Nursing & Paramedics Committee; and
- (f) The Academics, Research & Publication Committee.

8. Funds

Under the Ordinance, a fund would be required to be created in the name of this institution, which would vest in the institution and to which all sums received by the institution would be credited. The Ordinance opined that the Fund would be kept in custody and be utilized and regulated in the manner as prescribed by rules.

9. Budget, Audit & Accounts

The Ordinance allowed Government to order financial, medical and management monitoring and audit of medical/health institutions on quarterly basis, through a third party nominated by it and paid for by the institution concerned immediately on issuing any such direction by Government. The Ordinance proposed that the Audit Reports of all institutions would be

consolidated by the Government and presented to the Provincial Assembly in respect of each financial year.

10. Rules and Regulations

The Ordinance mentioned that Government would make rules for enforcing the Ordinance whereas Management Committees would form regulations in consistence with the provisions of the Ordinance 1999.

This Ordinance of 1999 repealed the Ayub Medical College Ordinance 1978.

3.2 Global Best Practices

The international jurisdictions selected for the purpose of comparison are those that have incorporated best practices including performance measurement and have achieved MDGs. Following review discusses the different health systems in developed and developing nations around the world and their efficiency in light of Healthcare Legislative Framework, Autonomy to Health Institutions, Health Information Management System and Public- Private Partnerships in Health Care.

3.3 Healthcare Legislative Frameworks

In its efforts to assure citizens of the quality and safety of healthcare, vigilant governments have responded by amending their timeworn healthcare regulations and come up with new and improved reforms in healthcare legislation. Europe, Australia, North & South America, residing most developed nations of the world, not only have strong legislative framework for health but also efficient and accountable implementing systems which make their health care systems top notch in the world. While in African and majority of Asian countries poorly managed law implementing institutions make their legislative framework to end up on constitutional papers only.

3.3.1 European Countries

In France, having most efficient Health Care System According to WHO the Ministry of Health regulates a large portion of healthcare expenditures. It prepares the annual Social Security Finance Act in conjunction with the Ministry of the Budget, Public Accounts and Civil Administration. The Act, subsequently passed by Parliament, sets a projected target (ceiling) for health insurance spending for the following year, provides a report on trends in policy for health and social security, and updates benefits and regulations.

The Ministry of Health is also responsible for:

- Apportioning the health budget among hospitals (including allocating funds to the regions), ambulatory care, mental health care, and the health and social sector for the disabled
- Determining the annual number of places available for medical students, as well as regulating the number of hospital beds and the amount of equipment, including expensive medical technologies
- Overseeing agreements between Statutory Health Insurance (SHI) and unions representing self-employed health care professionals
- Setting the prices of specific medical procedures and drugs on the basis of proposals from the National Health Authority (HAS) and establishing safety standards in hospitals

• Defining priority areas for national programs, which currently include programs for improving cancer and rare disease treatment, health and the environment, unhealthy behavior and addiction, and quality of life for people with chronic illnesses

Since 2004, the Ministry of Health and the "statutory health insurers" (SHI) have shared responsibility for defining the SHI benefit package and setting price and cost-sharing levels.⁴

In Italy, being the 2nd most efficient Health Care System, the central government controls the distribution of tax revenue for publicly financed health care (*Servizio Sanitario Nazionale*, or SSN) and defines a national minimum statutory benefits package to be offered to all residents in every region - the "essential levels of care" (*livelli essenziali di assistenza*, or LEAs). The 19 regions and two autonomous provinces have responsibility for the organization and delivery of health services through local health units (LHUs). The regions enjoy significant autonomy in determining the macro structure of their health systems. LHUs are managed by a CEO appointed by the governor of the region, and deliver primary care, hospital care, public health, occupational health, and health care related to social care. The SSN covers all citizens and legal foreign residents. Coverage is automatic and universal.

In England, responsibility for health legislation and general policy rests with Parliament, the Secretary of State for Health, and the Department of Health. The National Health Service (NHS) provides care, including hospital and physician services and prescription drugs, to all residents. Under the terms of the NHS Health and Social Care Act 2012, day-to-day responsibility for running the NHS has been handed over by the Department of Health and the Secretary of State for Health to a new governmental organization, the NHS Commissioning Board, subsequently renamed NHS England. NHS England is responsible for managing the NHS budget, overseeing the newly created Clinical Commissioning Groups (CCGs), and ensuring that the objectives set out in a so-called mandate by the Secretary of State for Health are met by the NHS, including both efficiency and health goals. CCGs have replaced Primary Care Trusts as local health care purchasing organizations: the intention was that they should be clinically led, but although the clinical contribution has been strengthened, other professionals—e.g., managers and accountants—remain important. Budgets for public health have been handed over by the Department of Health to local government authorities; the 2012 Act requires them to establish Health and Wellbeing Boards to improve coordination of local services, with particular reference to the need to reduce health disparities. Coverage is universal. All those "ordinarily resident" in England are automatically entitled to health care that is largely free at the point of use through the NHS. People from most European countries are also entitled to free care if they have a European Insurance Card. Only treatment in an emergency department and for certain infectious diseases is free to people not ordinarily resident, such as visitors or illegal immigrants. Most private hospital care—largely for elective conditions—is financed through supplementary private voluntary health insurance. The usual reason for acquiring such insurance is that it offers more rapid and convenient access to care.5

In Germany, within the legal framework, the Federal Joint Committee has wide-ranging regulatory power to determine the services to be covered by sickness funds and to set quality measures for providers. To the extent possible, their coverage decisions are based on evidence from health technology assessments and comparative-effectiveness reviews. The Federal Joint Committee is supported by the Institute for Quality and Efficiency (IQWiG), a foundation legally charged with evaluating the cost-effectiveness of drugs with added therapeutic benefits, and the Institute for Applied Quality Improvement and Research in Health Care (the AQUA Institute).

Since 2008, the Federal Joint Committee has had 13 voting members: five from the Federal Association of Sickness Funds, two each from the Federal Association of Statutory Health Insurance Physicians and the German Hospital Federation, one from the Federal Association of SHI Dentists, and three who are unaffiliated. Five patient representatives have an advisory role but no vote in the committee. During what is known as the 2011 health reform, four acts were introduced between 2010 and 2012. The final major piece of legislation for health care reform was passed in December 2011: the SHI Care Structure Act consists of a number of measures with the common objective of improving provision of services nationwide. Structural changes particularly relate to ambulatory SHI care and are intended to counteract the problem of underand oversupply. The "General Law on Patients' Rights" came into force into 2013. It includes several measures designed to strengthen patients' rights. The most important one is the incorporation of the treatment agreement into the Civil Code, in which the rights, duties, and forms of etiquette emerging from the relationship between provider and patient are established, as well as a statutory duty to provide information and documentation to patients upon their request.

In Ireland, overall responsibility for the health care system lies with the Government, under the direction of the MoHC in accordance with legislation enacted in the Oireachtas (legislature). The Minister is responsible for the strategic development and overall organization of the health service, including the setting of statutory regulations and orders. The DoHC provides support to the Minister and the Government by advising on the strategic development of the health system, evaluating the performance of the health system and working across sectors to promote health and well-being. Ultimately, the DoHC is charged with the responsibility of holding the health care delivery system accountable for its performance. Since 2005 the HSE has had full operational and financial responsibility for managing the public health system. Each year an annual National Health Service plan is prepared by the HSE. This must be approved by the MoHC within 21 days and is guided by the 2001 Health Strategy, legislative acts and government priorities. This detailed plan, running to almost 200 pages for 2008, sets out how the health budget will be allocated to hospitals, primary care and other services, and also indicates measures put in place to monitor and control implementation. This includes a ceiling on employment levels within the health system. Under section 8(1) b of the Health Act 2007 the Authority has the function of setting standards on the safety and quality of health and social care services provided by the HSE or a service provider in accordance with the Health Acts 1947 to 2007, Child Care Acts 1991 and 2001, the Children Act 2001 and nursing home services as defined in section 2 of the Health (Nursing Homes) Act 1990. Under section 8(1) c of the Health Act 2007, the Authority has the function to monitor compliance with standards and to advise the Minister for Health and the HSE accordingly.6

In Sweden, the three independent levels of Swedish government are all involved in the health system. At the state level, the Ministry of Health and Social Affairs is responsible for overall health and health care policy while working in concert with eight national government agencies directly involved in the areas of health, health care, and public health.4 The Ministry of Health and Social Affairs works to meet the objectives set by the Riksdag in the area of health care, health and social issues/insurance. This includes people's financial security, social services, health care, public health and the rights of children and people with disabilities. There are eight government agencies directly involved in the area of health, medical care and public health: the National Board of Health and Welfare (Socialstyrelsen), the HSAN (Hälso- och Sjukvårdens Ansvarsnämnd), the SBU (Statens Beredning för Medicinsk Utvärdering), the MPA

(Läkemedelsverket), the TLV (Tandvårds- och Läkemedelsförmånsverket), the Swedish Agency for Health and Care Services Analysis (Myndigheten för vårdanalys) and the National Institute Health (Folkhälsoinstitutet), the Swedish Social Insurance (Försäkringskassan). The Swedish Agency for Health and Care Services Analysis, established by the government on 1 January 2011, will analyze and evaluate implemented measures and the availability of information within the sphere of health and care service policy from the perspective of citizens and patients. In the area of public health, the National Institute for Public Health is also a government agency under the Ministry of Health and Social Affairs. It is similar to the national government health departments that exist in many countries, but it reports both to the Minister of Health and Social Affairs and to an independent board of directors. The main tasks of the Institute are to promote health and prevent diseases by providing the government, government agencies, municipalities and county councils with knowledge based on scientific evidence.7

3.3.2 North America

Canada has two constitutionally recognized orders of government, the central or "federal" government and 10 provinces. While they do not enjoy the constitutional status of the provinces, the three northern territories exercise many of the same policy and program responsibilities, including those for health care.8 The Canadian provinces and territories have primary responsibility for organizing and delivering health services and educating, accrediting, and licensing health care providers. Many provinces and territories have established regional health authorities that plan and deliver publicly funded health services on a local basis. Generally, these regional health authorities are responsible for the funding and delivery of hospital, community, and long-term care, and mental and public health services. Some jurisdictions have consolidated a number of these authorities in recent years. Health care providers are almost entirely private. The federal government co-finances provincial/territorial health insurance programs through the Canada Health Transfer. Federal funding is conditional on the provinces'/territories' adhering to the five criteria of the Canada Health Act, which sets pan-Canadian standards for hospital, diagnostic, and physician services. The federal government also regulates the safety and efficacy of medical devices, pharmaceuticals, and natural health products; funds health research; and administers several public health functions.4

In United States of America, the role of government is complex, and continues to evolve. Health insurance coverage is fragmented, with numerous private and public sources as well as wide gaps in coverage rates across the U.S. population. The Centers for Medicare and Medicaid Services (CMS) administers the Medicare program (a federal program for those age 65 and older, some of the disabled, and those with end-stage renal disease) and works in partnership with state governments to administer Medicaid and the Children's Health Insurance Program (joint federal–state programs for certain low-income populations). Private insurance is regulated at the state level, but generally is allowed wide discretion in designing benefit packages. The HHS is the key health agency in the United States. It has broad responsibilities for carrying out the instructions of the Congress and White House (the administration) regarding finances, planning / coordination, administration and regulation, as well as the provision of health services. Key government organizations within HHS include the following:

• The CMS is by far the largest agency in HHS because it administers the Medicare, Medicaid and CHIP programs, which cover about 100 million Americans.

- The AHRQ focuses on comparative effectiveness, quality improvement and safety, health information technology, preventive and care management and health-care value. It is generally viewed as the main federal government agency that focuses on health services research, although many other organizations address health services.
- The CDC works with partner organizations to accomplish its mission through such areas as health monitoring, prevention research, promotion of healthy behaviors, and fostering safe and healthful environments.
- The FDA is responsible for assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, food supply, cosmetics, and products that emit radiation. It also regulates tobacco manufacturing, marketing and distribution, with special interest in reducing tobacco use by minors.
- The National Institute of Health (NIH) fosters fundamental discoveries, developing resources to prevent disease and promoting scientific integrity. NIH has within it about two dozen institutes and centers, examples of which are the National Cancer Institute, the National Institute on Aging, the National Heart, Lung, and Blood Institute, and the National Library of Medicine.
- The Indian Health Service, also under HHS, serves nearly 2 million individuals with an annual budget of about \$4.7 billion, and is funded through federal government general revenues.⁹

3.3.3 South America

In Bolivia, the health system is predominantly public, with the Ministry of Health (MOH) directly attending 38% of the population. The MOH provides curative and preventive care through a network of 101 general and regional hospitals, 418 health centers, and 910 health posts, primarily located in rural areas. Another 26% is attended by the Social Security System (Insituto Boliviano de Seguridad Social/IBSS). The IBSS covers sickness, maternity, and work injury curative care for insured wage earners in industry, commerce, mining, and government. Services are provided directly to the beneficiary population in IBSS facilities in urban areas. Private non-profit providers, mainly internationally funded NGOs, attend an additional 5% of the population. The private for-profit sector attends less than 5% of the population, and a remaining 25-30% of the population has no access to formal health care. Reliance on traditional medicine, particularly in rural areas, is prevalent. 10 Universal Maternal and Child Insurance (SUMI) was established in 2003, with the aim of reducing maternal and child morbidity and mortality. This was to be achieved by granting benefits to women during pregnancy and for six months postdelivery, as well as to children under 5 years of age. In 2005, SUMI expanded its coverage to non-pregnant women under 60 years old and women of childbearing age. In 2006, the Health Insurance for Older Adults (SSPAM) program was created, for the population over 60 years of age. It is administered by the municipal governments, which assess an annual premium of US\$ 56 per beneficiary. The new Constitution establishes that access to health, education, and other basic services are basic rights. The Constitution of Bolivia (2009) trumpets the relationship between health and integral development, and recognizes interculturalism, decentralization, and autonomy in different areas, including health. It mandates the creation of a unified health system in which the traditional medicine of native indigenous nations and peoples and compassions has a recognized place, the guarantee of free access by the population to health services, and the creation of a social security system. 11

The Constitution of Ecuador (2008) mandates the creation of social inclusion and equity systems that guarantee the exercise of rights and the fulfillment of the country's development

objectives through the "living well" strategy. The Constitution also mandates free, universal State health services at all levels of care, underscoring the free nature of maternal health services and services for older adults, disabled persons, children and adolescents, and persons suffering from catastrophic, highly complex health conditions. Ecuador's Organic Health Law (2006) recognizes the Ministry of Public Health as the national health authority, with functions that include the exercise of stewardship in health and responsibility for the implementation, control, and enforcement of the Law and the regulations issued for its full application. The Constitution also mandates free, universal State health services at all levels of care, underscoring the free nature of maternal health services and services for older adults, disabled persons, children and adolescents, and persons suffering from catastrophic, highly complex health conditions.¹²

In Peru, Law No. 29,344 (2009) provides the framework for universal health insurance to guarantee the full and progressive right of every person to social security health benefits. It defines the functions of regulation, financing, provision, and supervision of insurance under the Essential Health Insurance Plan. The Ministry of Health, as the lead agency, is responsible for the decentralized, participatory adoption of regulations and policies governing the promotion, implementation, and strengthening of national health insurance.

3.3.4 Australia

The Australian government plays a strong role in national policymaking but generally funds, rather than provides, health services. The federal government funds and administers the national health insurance scheme, Medicare (previously a statutory authority and now a government agency), and pharmaceutical benefits; funds public hospitals and population health programs (with the states/territories); regulates much of the health system, including private health insurance (PHI), pharmaceuticals, and medical services; and has the main funding and regulatory responsibility for government-subsidized residential care facilities. Under the National Health Reform Agreement, endorsed by the Council of Australian Governments in 2011, the role of the Australian government has been strengthened in relation to the funding and governance of public hospitals and primary care. The eight states and territories ("states") administer public hospitals and regulate all hospitals and community-based health services. Local government is involved in environmental health and some public health programs, but not clinical services.4 Medical treatment is largely free and its use largely unlimited. Treatment in public hospitals is free to the user, treatment by general practitioners and specialists is free (if the doctor bulk-bills Medicare), while essential pharmaceuticals are subsidized. Subsidies are limited to items on the respective medical and pharmaceutical benefits schedules. Pensioners are entitled to substantial concessions or to free treatment. There is no limit upon the amount of medical services that an individual may use, health care benefits are not rationed, and there is little public debate on whether or how to ration services. Public hospital services, however, are prioritized (a form of rationing) through waiting lists for elective surgery. 13

3.3.5 Asian Countries

In China, health care is governed by the legal document formulated by the National People's Congress and its Standing Committee. Health care legislation is divided into two parts, one instituted by the National People's Congress, the other by the Standing Committee of the National People's Congress. The first, called the Fundamental Health Law, has not yet been completed. The other part is the hygienic common law. Chinese health care is regulated by the normative legal document formulated by the State Department. The State Department has

hitherto constituted 32 health care regulations. Department rules are those legally constituted by the administration of public health, such as the State Food and Drug Administration, the Family Planning Commission of China, Entry-Exit Inspection and the Quarantine Bureau, etc. In total, there are 92 department rules in the area of health care. The patients' role is not clearly defined in the Chinese legislation but it is claimed that it aims on protecting the patient's rights and independence. However, at present no special law defines how patients' rights are to be protected, only some prescripts are found in the health laws and regulations currently in force:

- the reasonable and limited right of independent choice of medical treatment,
- the right to be informed about their illness, and the right to consent to medical treatment,
- the right to monitor medical services and protect patients' rights and interests.
- cooperating with the doctor during diagnosis and treatment,
- paying for medical services,
- observing regulations prescribed by the hospital during treatment.

In China, health care staff protects the people's health. In 1977, Engel pointed out that, "It is inevitable that the direction of medical development would gradually turn from the simple biomedical model into bio-psycho-social medical model". This concept was first introduced into China in the National Medical Dialectic Conference in 1981. After this, the attitude to the patient was supposed to change. The focus was to switch from therapy to prevention, from physical care to psychological care, from inpatient to outpatient care, and from technical service to more social service, to enhance the level of prevention, health care, and rehabilitation.¹⁴

In Nepal, The Parliament is known as the legislative body of the State and is the source of law. Currently in Nepal, the Constituent Assembly also functions as the Legislature of Parliament. Acts are passed by the Parliament and after authorization of the President they come into force as laws of the land. The Interim Constitution of Nepal provides the right to health and environment as a fundamental right of the citizen of Nepal. The Constitution has clearly stated:

- 1. Every citizen shall have the right to get free basic health service from the State as provided by the law.
- 2. Every person shall have the right to live in a clean environment. Similarly, the Constitution has also clearly mentioned that women, workers, the old aged, the disabled, as well as incapacitated and helpless citizens, shall have the right to social security as provided by the law. However, no Act of Parliament has defined social security and basic health service.¹⁵

In India, Under the Indian Constitution, health is a state subject. Each state therefore has its own healthcare delivery system in which both public and private (for profit as well as non-profit) actors operate. While states are responsible for the functioning of their respective healthcare systems, certain responsibilities also fall on the federal (Central) government, namely aspects of policy-making, planning, guiding, assisting, evaluating and coordinating the work of various provincial health authorities and providing funding to implement national programs. The organization at the national level consists of the Union Ministry of Health and Family Welfare (MoHFW). In each State, the organization is under the State Department of Health and Family Welfare that is headed by a State Minister and with a Secretariat under the charge of the Secretary/Commissioner (Health and Family Welfare) belonging to the cadre of Indian Administrative Service (IAS). The Indian systems of medicine consist of both Allopathy and

AYUSH (Ayurveda, Yoga, Unani, Siddha and Homeopathy). The Government has attempted to define standards for healthcare facilities through legislation such as the Clinical Establishment Act, the National Accreditation Board for Hospitals and Healthcare Providers (NABH) and the Indian Public Health Standards (IPHS). Despite these efforts, there is no single authority and unified system in place to ensure that people have access to appropriate and cost-effective care. As health is a State responsibility, these issues are left for them to manage. ¹⁶

3.3.6 African Countries

In Uganda, Currently, MoH is coordinating the drafting of bills to promote and regulate health services. Bills (e.g. the Pharmacy Profession and Practice Bill; Uganda Medicines Control Authority Bill; National Health Insurance Bill and the Traditional and Complimentary Regulatory Bill) are at different stages of development. Some legislation is quite old e.g. the Public Health Act. Attempts to review it were halted in 2003 as the new Health Services Bill was considered too broad. The process of reviewing legislation and policies has generally been very slow: e.g. the Pharmacy Profession and Practice Bill and the National Policy on PPPH were initiated in 1999 and the process has not been completed. The financial and human resources allocated for these processes have been inadequate. Technology has changed and emerging diseases such as NCD require legislation. While legislation and policies may exist, enforcement is a major challenge.¹⁷

In Zimbabwe, The Health Service Act provides for the establishment and the operations of both public and private hospitals and Medical Aid Societies. Minimum standards of practice for both hospitals and medical aid societies are also provided for in the Act. The Health Service Act provides for the establishment of the Health Service Board, Community Health Councils and Hospital Management Boards at Central and Provincial Hospitals. The Ministry of Health and Child Welfare operates within the functions mandated to the office of the Minister of Health and Child Welfare (Restricted: Hand-book on the Functions of the Minister of Health and Child Welfare, March 1993) as well as the provisions of the Public Health Act (Chapter 15:09) and the Health Service Act amongst others. The health sector activities have been guided by two policy documents, Planning for Equity in Health of the early 1980s and the National Health Strategy, "Working for Quality and Equity in Health" (1997-2007).¹⁸

In South Africa, The National Health Act, 61 of 2003, provides a framework for a single health system for South Africa. The Act provides for a number of basic health care rights, including the right to emergency treatment and the right to participate in decisions regarding one's health. The implementation of the Act was initiated in 2006, and some provinces are engaged in aligning their provincial legislation with the national Act.¹⁹

3.4 Autonomy of Health Institutions

Autonomy is defined in the dictionary as the quality or state of being self-governing, especially, "the right or power of self-government"; "existing or capable of existing independently"; and "subject to its laws only". However, such absolute criteria are of little help in defining hospital autonomy, as no hospital in any country is completely self-governing, totally independent, or subject to its own laws. After all, hospitals, whether in the public or private sector, are all subject to government regulations in one form or the other. In order to address this problem, some authors have defined autonomous hospitals as those that are "at least partially self-governing, self-directing, and self-financing". While such a definition acknowledges the relative nature of autonomy, it raises the question: How "partial" can the powers of the hospital are to remain

compatible with common notions of autonomy? In other words, how does one decide the "cutoff" point between autonomy and the lack of it? It is our contention that the term "autonomous hospital" has meaning only when used in the sense of fulfillment of specific criteria for autonomy on which consensus is reached. In other words, hospitals can only be autonomous within a predefined context. Within this context, hospitals can enjoy various levels of autonomy. Recently, hospital autonomy was introduced with a major emphasis to improve efficiency in the delivery of health services by the public sector. The term autonomy carries a number of connotations such as good governance, contractual relationships between public hospitals and the government, market exposure. It also means different things in different contexts. Different conclusions with regard to improving system efficiency have been derived from the experiences of several countries adopting hospital autonomy. Yet, there are a number of reports devoted to discussing the implications of hospital autonomy on the management of human resources in health. There are several issues that are critical to the successful implementation of hospital autonomy. Many problems and issues related to autonomy can be identified. For example, the inexperience of hospital management, lack of preparedness, mismatch of skills, poor information systems, and community demands on an autonomous institution may have an adverse effect on the performance of the autonomous hospital. It is useful to document and understand the process by which the hospital resolves these issues. Hospital autonomy is likely to affect the following areas.20

- Scope of Operations
- Quality of Care: Structure and Process
- Staff Availability and Productivity
- Equipment Availability
- Availability of Drugs
- Availability of Supplies
- Maintenance/Cleanliness
- Patient Access
- Patient Satisfaction
- Quality of Care: Outcomes
- Cost, Efficiency and Financing
- Cost Efficiency
- Financing
- Staff Processes within Hospital
- Productivity
- Morale
- Discipline
- External Relationships
- Accountability

- Community involvement and accountability
- Reporting systems
- Financial reporting/auditing
- Changes in Relationships
- Government
- Donors
- Other hospitals
- Medical School

3.4.1 European Countries

European public hospitals have undergone a process of change by which they remain publicly-owned but use incentives and follow practices similar to those in the private sector. Governance theory explains the crowded policy process and complex mosaic of decision-making relationships among different actors within the hospital sector, often with blurred boundaries. A central element in those reforms has been establishing some autonomy, which is necessary to confront challenges and to restrain the interference of local and regional political actors in decision-making. Institutional, financial and accountability arrangements as well as decision-making capacity versus responsibility are core variables that capture semi- autonomous governance.²¹

A Spanish hospital management autonomy study concludes that Organizational decentralization is a potential mechanism for facilitating change in the activity level of organizations including those in health care, which could in turn enhance improvements in their efficiency. This may take place through improvements in the degree of policy innovation and dynamism seen in the system, as well as greater levels of transparency. However, there may also be additional transaction costs associated with a looser level of central control (and greater need for voluntary coordination and cooperation) and there may also be initial inception costs that would be expected to smooth over time.²²

Analysis of another Spanish case confirms three factors. First, hospital autonomy, far from being a one-off technical solution, becomes embedded in powerful political and social structures which can both limit or enhance the hospital's capacity for change – in other words, context and politics matter. Second, old models of command and control, public administration or even private-sector management styles are no longer useful, even if the governance model that implies using new tools in response to changes in state-society relationships have receded with the crisis. Third, but by no means least, political tensions make it difficult to conduct the kind of scientific evaluation of innovative governance that is required. Under such circumstances different stakeholders tend to show only the evidence favoring their preferred option instead of accepting all impartially produced evidence.

In United Kingdom, a study concluded that Building and running hospitals absorbs the major share of health expenditure in any country. As demand for hospital care increases and the costs of provision rise, it is essential to make more efficient use of the resources already devoted to hospitals. There are three main types of initiatives in improving hospital efficiency:

- Making more efficient use of the resources available across the health system, by reviewing the numbers of hospitals and their distribution, to see whether resources can be better allocated between hospitals and regions, for example by reducing duplication of services or closing some hospitals.
- 2) Increasing hospital autonomy and giving managers clear responsibility for performance, so they can make decisions more quickly at a local level based on local conditions and priorities, rather than following centrally determined decisions and regulations.
- 3) Introducing measures to make more efficient use of the resources available to the hospital sector, for example by cutting down wastage and abuse in purchasing of supplies, using generic rather than branded drugs, improving procedures and rationalizing staff levels and mix to achieve more patient throughput relative to staff inputs.

These approaches are related: greater hospital autonomy with clear responsibility and accountability means that hospital managers have incentives and opportunities to introduce efficiency improvement measures in their hospitals.²³

In a research conducted in UK, France, Italy, Germany and Sweden: "Management in Healthcare: why good practice really matters", the research finds a strong relationship between management practice, hospitals outcomes and policy related variables, such as perceived levels of competition, percentage of clinicians who are "managers," hospital size, managers' autonomy, and ownership type. Not surprisingly, higher-performing hospitals have managers (who are often clinicians) with higher levels of autonomy than lower-performing hospitals. Autonomy is important because it is one of the strongest incentives (financial or non-financial) for managers.²⁴

3.4.2 Latin America

A case study in Bolivia showed that Decentralization has been predicted to improve health sector performance in a number of ways, including the following: (1) improved allocative efficiency through permitting the mix of services and expenditures to be shaped by local user preferences; (2) improved production efficiency through greater cost consciousness at the local level; (3) service delivery innovation through experimentation and adaptation to local conditions; (4) improved quality, transparency, accountability, and legitimacy owing to user oversight and participation in decision making; and (5) greater equity through distribution of resources toward traditionally marginal regions and groups. At the same time, fears have been raised about potential macroeconomic destabilization and the aggravation of interregional disparities in wealth and institutional capacity as a result of decentralization. The recent proliferation of decentralization policies is part of a broader process of political, economic, and technical reform (World Bank 1998). These include "democratization" and, perhaps more importantly, the neoliberal "modernization" of the state. The latter movement promotes institutional and territorial decentralization as a means to introduce competition and cost-consciousness into the public sector, and develops a new role for the state in "enabling" and "steering" rather than replacing private sector activities. The promotion of cost-effective investment in primary care and outreach services, beginning with the Alma Ata Conference on Primary Health Care in 1978 and reinforced in the World Bank's 1993 World Development Report, have provided a further technical impetus for health sector decentralization.²⁵

Hospital autonomy involves public hospitals that pass from being part of the public health sector to being institutions that rely on greater freedom in their governance and management. Autonomy seeks to improve efficiency, the acknowledgment of physician responsibilities, accountability and recipient decision making in the provisioning of services. Likewise, it seeks to improve the quality of care, to reduce costs and to increase institutional surpluses. In Africa, many experiences of hospital autonomy were implemented through decentralization processes. In Latin America, there have been other experiences. The implementation of autonomous state entities (Entidades Autónomas del Estado) in Columbia and of the selfmanaged hospitals (Hospitales Autogestionados) in Argentina are examples of autonomy that pose policy challenges for human resources for health. In Columbia when Law 100 entered into force, the public hospitals were transformed into autonomous state entities with the power to establish contracts with the health promotion companies (Empresas Promotoras de Salud, EPS). The EPS carried out the functions of health insurance providers and of service providers for insured patients, and they provided services to the institutional health service providers (Instituciones Prestadoras de Salud, IPS). The IPS were the public or private health service providers responsible for delivering services. This way, the public hospitals could acquire autonomy to establish contracts with the EPS and provide health services. The establishment of the EPS and the IPS began an uncertain scenario for human resources for health, where fears of hospital privatization, employment instability and the desire for information and guidance to face the changes were the main aspects described in their implementation. Moreover, the contracting of third parties by the IPS generated greater employment Flexibility and a reduction in salaries. The Argentinean reform of the 1990s decentralized the health care system, in regards to insurance providers as well as in the provisioning of services. In the provisioning of services, allowing the self-management of public hospitals stood out. These establishments could negotiate contracts with private insurance and with service providers, sell services, charge copayments and devote part of their income to incentive structures for human resources. Nonetheless, these changes provoked differences in the budget destined for the management of human resources and the existence of a fearful climate and lack of confidence among health teams.26

In Mexico, Zapatista healthcare is completely independent of all government funding and control; they have developed their own autonomous forms of health, democracy and decision-making. In Zapatista clinics and health houses people are treated with respect, love and responsibility. Because the health promoters are local, people can be talked to in their own language, by someone who understands their needs and culture. In the government hospitals, indigenous people are discriminated against, misunderstood, ignored. Many non-Zapatistas now come to the Zapatista centers for treatment, knowing they will not be turned away. This means that, in a country where most people, particularly indigenous people, cannot afford medical treatment, which may not be available to them anyway for political reasons, Zapatista healthcare is open to everyone. Non-Zapatistas only pay for the basic cost of medicines or any materials needed; the treatment is free. Healthcare is for all, without distinction.²⁷

3.4.3 Asian Countries

In China, since the mid-1980s – with the collapse of the previous era's commune-based health system – the main impetus behind hospital reform has been to reduce the financial burden that hospital care places on government budgets. In 1992, the Ministry of Health granted substantial financial autonomy to hospitals, allowing them to charge for their services and to sell drugs at a profit. They are now permitted to keep the surpluses that they generate, and they are

responsible for their debts and operating losses. They can use their surpluses to invest in new facilities and services, or to finance salary enhancement systems.

Prices for basic medical care are regulated. In general, medical services produce net losses, and drug revenues produce net gains. Hospitals have been given freedom to develop higher quality services for which they can charge prices above the levels reimbursed by social insurance. Public hospitals can also enter into joint ventures with the private sector. They are allowed to raise social capital from medical staff and retirees, which can then be invested in private for-profit units within the public facilities.

Policies regarding hospital organization face certain limitations and constraints. Although hospitals now enjoy considerable autonomy in their use of private revenues, governance continues to follow the traditional public-sector model. Hospital funds from government budgets are still allocated and controlled by the government hierarchy. Personnel management is still subject to central public sector controls over staffing structures and grades. Intervention from higher levels of government continues despite autonomous status. There is a lack of plurality in hospital provision; and in many areas, there is little competition among providers.²⁸

In Nepal, Hospital Development Boards have been formed for all government hospitals above the district level. This has recently been extended to 12 district hospitals and will expand further as experience is gained. The MoH, in addition to providing capacity development for performance management and quality standard setting, will extend autonomy to all public sector hospitals. There will be piloting of contracting out hospital services. Options for Hospital Funding include:

- i. Develop a system of charges for hospital services together with assessment and subsidy for those unable to pay.
- ii. Refine the concept of Social Health Insurance and how it will be applied to hospitals.
- iii. Encourage hospitals to make use of income from charges to improve the quality of services.

To increase the willingness of the population to pay for services the quality of the services must be improved concurrently with the introduction of user fees.

Autonomy for hospitals will be created in a phased manner over the course of 5 years. Presently, Nepal lacks the human resources and management infrastructure to introduce autonomy rapidly. Preparation will involve training a cadre of hospital administrators and adoption of written guidelines for policies and procedures for autonomous hospitals.²⁹

A Thai case study concludes that Hospital Autonomy (HA), a form of decentralization in Health Service System, is a growing trend throughout the world. It is a fascinating approach toward more system efficiency. One of the key features in this regard is the improvement of Human Resource Management (HRM). However, there is no guarantee that HA will automatically and consistently lead to improved system efficiency. Expected outcomes of HA reform depend on the extent, features and processes of the reform. If HA will lead to the betterment of HRM in terms of deployment, utilization, planning, and training & education, the scope of autonomy should include a network of providers rather than individual hospitals. Communities and all other relevant stakeholders should be mobilized to actively take part in the HA process. The central ministry (MOPH) should redefine its roles and functions. Capacity building for Human resources for health (HRH) planning should be strengthened at all administrative levels. MOPH should coordinate the efforts to ensure continuous learning and capacity development of health

personnel. Systems to provide relevant and timely information for HRH planning, deployment, utilization and training and education are needed.³⁰

3.4.4 African Countries

In Kenya, it appears that the granting of autonomy to KNH has been successful in many respects, although progress has been neither smooth nor fast, and some of the potential benefits are still to be realized. The *state corporation model* used to grant KNH autonomy seems to have been appropriate in that it gives responsibility and authority to the Board to run the hospital, yet the government retains an element of control; most notably over Board appointments, funding levels, fee structures, and staff remuneration levels. The model appears to have worked best when a dynamic Hospital Director has been combined with a strong, well-qualified, supportive Board, and when these individuals have had public confidence and respect. Under these circumstances, it has been able to balance the power held by the MOH and has been an effective buffer against political pressure. Managerial changes that were supposed to happen when autonomy was granted actually took some time to be implemented because of the *lack of preparation*. When the Board became more involved in management, the strength of the experienced private-sector members was useful, and the participation of senior civil servants was particularly helpful for dealing with issues such as government funding and patronage.

Nevertheless, some KNH staff believe that the idea of bringing in an external management team to accelerate progress towards autonomy has some merit if it is planned and implemented with the involvement of those responsible for managing the hospital in the long run. Improvements in financial management and supplies were slow to materialize because staff were reluctant to change from government systems, even though those systems were inadequate. Better accounting systems are now in place and financial statements are being produced in a timelier, detailed, and accurate fashion, which provides much greater financial transparency.

However, an important benefit of autonomy was the introduction of a block grant, which removed MOH restrictions on line-item shifts within the KNH budget. A later modification of KNH's category in the MOH budget eliminated the ability of the MOH to transfer funding from KNH to other hospitals. The amount of government recurrent and development funding to KNH has been increasing as a *share of total MOH funding*. While this has helped KNH to improve its services, such increases for tertiary care may be inappropriate given the lack of funding for primary and preventive services.

The *role of KNH in the national health care system* has probably benefitted somewhat from its increased autonomy, in that it has been able to press successfully for a reduction in size, which has helped to relieve some of the demand for primary and secondary service provision.

There appears to have been some improvement in *technical efficiency* and *quality of care* due to the increased availability of supplies and improvements in building and equipment maintenance.

Increased autonomy at KNH has improved its ability to *negotiate*, *plan*, *implement and be accountable* for donor assistance projects and to report on performance. At the same time, the increased managerial flexibility and skill achieved as a result of autonomy has helped KNH to appreciate and apply lessons learned under such donor projects.

The increased autonomy has also allowed KNH to deal directly with public relations issues, which has enabled the hospital to achieve a greater balance of press coverage with fewer disaster stories and more positive ones.

In addition, while increased autonomy has provided a foundation for management improvement, the provision of donor-funded *technical assistance* has contributed to the development of systems and capacity.³¹

In Zimbabwe, in the past year, the government of Zimbabwe has expressed interest in decentralizing hospital management and expanding autonomy not just at Parirenyatwa Hospital but at hospitals throughout the country. This interest is reflected in plans to promote contracting out by hospitals of security, grounds maintenance, internal cleaning, and laundry, which would have the effect of reducing the civil service employment at the hospitals. It is also reflected in concept papers released by the MoHCW regarding the creation of a social insurance program in Zimbabwe and shifting funding for provincial and central hospitals from grants to fee-for-service payments by district health systems, central government and the University. It is reflected in concept papers regarding turning ownership and management of hospitals to district boards or hospital boards. Part of the infrastructure needed to implement these proposals, such as improved cost accounting, and is being tested in selected hospitals.

Several lessons emerge from the experience of Parirenyatwa Hospital, Wankie Colliery Hospital, and Avenues Clinic for implementing effective efforts to decentralize hospital management and increase hospital autonomy.

- Hospital leadership must be appointed that is committed to implementing expanded autonomy and can effectively articulate a vision of autonomy to the hospital staff and other hospital constituencies. The hospital leadership must be able to gain the confidence and cooperation of the hospital staff.
- 2) The financial and managerial accounting and billing systems currently in place in hospitals are not adequate to allow hospitals to effectively price their services, bill in a timely fashion, budget, manage against budget, or adjust budgets in real time to reflect changing demand or economic circumstances. This is apparent in the case of Parirenyatwa Hospital. Upgrading these systems and the staff administering them will be a critical element in implementing any policies that put hospitals at risk for balancing revenues and expenditures. The evidence from within Zimbabwe at the private hospitals and presence of appropriate systems in other African teaching hospitals suggests that these needs can be quickly addressed if the commitment to doing so is present.
- 3) In a decentralized hospital system the MoHCW must be willing to relinquish authority over senior appointments, staffing, service offerings, and operational management of the hospitals. Without clear signals that MoHCW management has been irrevocably restricted, there is a risk that hospital executives and staffs will move slowly to assume responsibility but will instead continue to look to MoHCW for direction. Board and governance structures for the hospitals must be created that will have effective control and make it difficult for the MoHCW to reassert operational authority over autonomous hospitals. At the same time, the process of appointing Boards must be such that the government will retain confidence in the Boards and their capacity to oversee the hospitals.

There are several critical transitional issues that MoHCW must resolve if it will move toward decentralized financing and management.

- One of the critical issues to be resolved is the question of whether hospital employees should remain civil servants. From the hospital perspective, this issue is important because it affects the ability to flexibly staff and adjust staffing to changing demands, and to exercise supervision and control over staff through the ability to hire, fire, promote and discipline. From the employee perspective, the issue is critical because it affects job security and tenure in an economy in which unemployment is very high.
- Whatever is done should be done with sensitivity to the impact of uncertainty and change on hospital worker productivity and morale. The announced proposal to promote contracting out of selected hospital functions has lowered morale at Parirenyatwa Hospital. This by itself is not a justification for not moving forward, but it does underscore the need to consider how a transition should be announced and implemented.³²

In Uganda, the MOH granted the two National Referral Hospitals, Mulago Hospital Complex and Butabika Mental Hospital a limited status of autonomy, i.e. "self-accounting status". The ministry planned to grant the two hospitals and the regional referral hospitals greater autonomy eventually. The full implementation of autonomous status was expected to be completed by 2003.

Autonomy focuses on five main administrative and functional areas, which may be ranked either as low, fair or high.

- 1) Strategic or General management
- 2) Financial management
- 3) Human resource management
- 4) Procurement
- 5) Administration

Respondents of the study identified the following as benefits that could so far be attributed to the two hospitals being granted autonomy.

- a) Increased efficiency, as the hospitals were able to take their own decisions without having to consult the MOH.
- b) The interim boards and hospital management had to work together to prepare the hospitals for full autonomy. With the guidance of each other, the members had displayed a high level of collaboration in decision-making and sharing responsibilities.
- c) The MOH did not have to involve itself in running the hospitals. This had enabled it to focus more on policy matters. The Ministry would only intervene in hospital issues when crises arose, that were beyond the board and hospital management.
- d) There was noticeable improvement in the quality of services as well as efficiency in management.
- e) The board of directors was expected to act as a public relations body for the hospital. The composition of the boards ensured that several interests were represented and this was a good way of taking feedback to the public.

f) There was reduced bureaucracy in implementing management actions.

Problems faced by the hospitals in Uganda were:

The hospitals do not have adequate funding. With autonomy this was bound to be a big problem. Hospital budgets had been increased by 29% in the Fiscal year 2003/04 and it was expected to increase further when Primary Health Care funding stabilized. Possibilities of raising funds from alternative sources had not been explored by the hospitals and the MOH. They were hoping for increased government funding. The hospital could not use revenue collected at source and according to key informant interviews, this affected their efficiency in quickly responding to problems at source.³³

3.5 Health Information Management Systems

Reliable and timely health information is one of the foundations of effective health service management and public health action. Increases in national and international funding for health have been accompanied by greater demands for data and statistics to monitor program implementation and performance, evaluate progress and ensure accountability. This has led to greater investments in health information, especially data collection. Many countries, however, still lack basic and effective health information systems.

Indeed, the very countries that face the greatest health challenges generally have the weakest systems for gathering, managing and using information. This gap, often referred to as the "information paradox", is most apparent in the reliable documentation of vital events, such as births and deaths. An estimated 40 million births, representing about a third of the world's annual total, and 40 million deaths, representing about two thirds of the world's annual total, go unrecorded each year; most of these occur in Africa and Asia.

Healthcare information systems (HISs) are often implemented to enhance the quality and patient-centeredness of care, as well as to improve the efficiency and safety of the services. However, the outcomes of HISs implementations in both primary care and hospital settings have not met expectations. Research reports indicate that there is a need to study HISs implementation process and its organizational consequences.

3.5.1 European Countries

In France, In 2008, the General Inspectorate for Social Affairs published a report that expanded on earlier projects and presented six principles for the success of electronic health record (EHR) technology: 1) to be useful for professionals; 2,3) to be modular and implemented incrementally, based on emerging requirements; 4) to be deployed according to an agreed-upon time frame; 5) to strike a balance between informational requirements and the protection of patients' privacy; and 6) to have clear governance. The report recommends the creation of a high-level committee, chaired by the minister of health and comprising members of parliament and representatives of all stakeholders, to govern the project, and also recommends the creation of a government agency to take charge of health information technology (HIT). Apart from the EHR project, there are two coexisting HIT systems: one for hospital admissions (the PMSI), used by hospitals to bill SHI, and one for patient reimbursement claims for outpatient and hospital care. The National Health Insurance Inter-Plan Information System (SNIIR-AM) was created in 2004 to connect the two into one comprehensive system, the SHI interfund system, and the unique identifier that allows linkage of PMSI and SNIIR-AM is being pilot-tested. Currently, the PMSI system comprises information on medical diagnoses and procedures performed during an

admission, while the SNIIR-AM includes claims data only, with demographic information but no medical information, although some claims can be directly connected to a medical condition.³⁴

In United Kingdom, The National Health Service Commissioning Board has given the Directions to the Health and Social Care Information Centre in exercise of the powers conferred by sections 254(1), (3) and (6), 260 (4)(a), 262(1), (3)(a), (5),(7)and 304(9), (10) and (13) of the Health and Social Care Act 2012. The rationale behind the Directions is to facilitate the information system defined in the Care Episodes Statistics: Technical Specification of the GP Extract published in May 2013 by NHS England. This defines release of the care data system, which includes linkage of primary care data to data on hospital activity. Analysis of the resulting data will provide NHS Commissioners and the public with information better to understand the overall NHS care pathway, and to facilitate commissioning of services and improvement of services.

The key components of the Directions are:

- direction to the Information Centre to collect primary care data and link this to Hospital Episodes Statistics as the first stage of analysis (sub-paragraphs 3(1)-3(3) and subparagraph 4(3)(a));
- direction to the Information Centre to carry out further analysis including data manipulation and report generation as may be requested by commissioners (subparagraph 3(4) and sub-paragraph 4(3)(b);
- explanation of benefits for communities, patients, GPs and other clinicians (subparagraph 3(4));
- specification of the data items to be collected with reference to the Technical Specification (sub-paragraph 4(1));
- specification of "sensitive" data items to be excluded also with reference to the Technical Specification (sub-paragraph 4(2));
- direction to the Information Centre to comply with the guidance published by the Information Commissioner's Office: Anonymisation: managing data protection risk code of practice, and the Anonymisation Standard for Publishing Health and Social Care Data Specification published by the HSCIC3 (paragraph (5));
- direction to the Information Centre is to disseminate record level data to NHS Commissioners – with specified controls in place to ensure confidentiality is maintained (paragraph (6));
- direction to the Information center not to disseminate identifiable data (paragraph (7));
- Management of patient objections (paragraph (8)).³⁵

In Norway, the National Health Network, a centralized company owned by the state, seeks to establish a single information exchange platform, providing a single point of communication for GPs, hospitals, nursing homes, pharmacists, and others. A national strategy for health information technology (HIT) is the responsibility of the Directorate for Health, and implementation is promoted through a departmental steering committee. Every patient is allotted a unique personal identifier. HIT in primary care is fragmented, and some areas of service lack the resources and equipment for its implementation. Currently, virtually all GPs use electronic

patient records, and most receive discharge letters electronically from hospitals, but uptake by municipality home care and nursing homes has been slower owing to more complex and integrated information system requirements. ³⁶

In Italy, in 2001, the New Health Information System (NSIS) was developed to establish a universal system of electronic health records that connects every level of care and provides information on the services delivered, resources used, and associated costs. The NSIS has been implemented incrementally since 2002, but is not yet universal. A core part of NSIS is represented by a nationwide clinical coding program, the "bricks" program, aimed at defining a common language to classify and codify concepts in a uniform manner; to share methodologies for measuring quality, efficiency, and appropriateness of care; and to allow an efficient exchange of information between the national level and regional authorities. The bricks program has been the focus of considerable effort and is one of the most mature elements of Italy's developing electronic health program. Some regions have developed computerized networks connecting physicians, pediatricians, hospitals, and territorial services to facilitate communication among health care professionals and to improve continuity of care. These networks allow automatic transfer of patient registers, services supplied to patients, prescriptions for specialist visits and diagnostics, and laboratory and radiology test outcomes.³⁷

3.5.2 Australia

In Australia, The national strategy on health information is managed by the Australian Health Ministers' Advisory Committee (an intergovernmental committee of senior health administrators), and the National Health Information Agreement in place between governments and other key agencies aims to develop, collect, and exchange data in order to improve the health of the population and the delivery of health services. The National E-Health Strategy, an intergovernmental strategy on health information technology, has been published, and the National E-Health Transition Authority has been set up in order to develop patient identifiers, interoperable systems between providers, and a clinical terminology and information service. A unique health identifier is being implemented under the 2010 Healthcare Identifiers Act. Many GPs already use electronic decision support systems. Since July 2012, all Australians have been able to choose to register for an electronic health record that can be accessed both by individuals and by their authorized health care providers.

3.5.3 Americas

In Bolivia, A program on Information, Knowledge, and Communication Management was created, with the aim of bridging the gap between knowledge generation and access to information. Bolivia's entrance into the SciELO network (60) is the result of a joint effort by a number of Bolivian and international academic and health institutions, including the Vice–Ministry of Science and Technology, San Andrés University, the Program for Strategic Research in Bolivia, the Bolivian Catholic University, the Bolivian Association of Publishers of Biomedical Journals, PAHO/WHO, and the Latin American and Caribbean Center on Health Sciences Information (BIREME/PAHO/WHO). Bolivia is the sixteenth country to enter the SciELO network, and it participates with 15 scientific journals. The SciELO network's node in Bolivia is coordinated by the Vice–Ministry of Science and Technology, and it has a National Advisory Committee comprised of four scientific editors, four research–supporting institutions, and an operational center located at San Andrés University in La Paz. In addition, the Ministry of Health and Sports has created a virtual library on public health and related topics, with the participation of public and private institutions, public and private universities, hospitals, NGOs, international

agencies, professional associations, scientific societies, and other institutions involved in the public health field. Currently, 140 institutions participate in the virtual health library as cooperating centers, depending on the subject matter. The library collection includes some 300,000 electronic records and 20,000 full–text documents, as well as other sources such as news reports, directories, event listings, multimedia presentations, and a collection of photographs.

Creation of the Vice–Ministry of Science and Technology was an important milestone. Its activities are spelled out in the National Science and Technology Plan, which in turn is part of the National Development Plan. Regulation of the National Health Research System is a building block in the Technology Management and Research Project, which includes processes for diagnosing research needs, dissemination of research in the health system, health research promotion and production, and education and training of human resources for health research. Similarly, the national system promotes the strengthening of entities to analyze research findings. The Ministry of Health and Sports has taken the lead in setting priorities for health research, and it promotes the integration of research findings, action, and improvements in health policies and programs, based on a perspective of equity and solidarity, in order to meet the needs of vulnerable population groups. After being registered and analyzed, scientific and technical works are published in the LILACS databases; between 2003 and 2009, 1,100 publications were cataloged.³⁸

In Canada, a meta-synthesis shows there is some evidence for improved quality of care from HIS adoption. However, the strength of this evidence varies by topic, HIS feature, setting, and evaluation metric. While some areas, such as the use of reminders for guideline adherence in preventive care, were effective, others, notably in disease management and provider productivity, showed no significant improvement. Factors that influence HIS success include having in-house systems, developers as users, integrated decision support and benchmark practices, and addressing such contextual issues as provider knowledge and perception, incentives, and legislation/policy. Drawing on this evidence to establish benchmark practices, especially in non-academic settings, is an important step towards advancing HIS knowledge.³⁹

In USA, in 2012, 69 percent of primary care physicians used some form of electronic medical record system, as did 27 percent of hospitals in 2011. There is no unique patient identifier in the U.S. To stimulate the uptake of HIT, the 2009 American Recovery and Reinvestment Act made a significant investment through Medicare and the Office of the National Coordinator for Health Information Technology. Financial incentives for physicians and hospitals, totaling up to US\$27 billion over six years, were tied to the attainment of benchmarks for the "meaningful use" of HIT. Regional HIT extension centers were also created to provide technical assistance, guidance, and information on best practices to support providers' use of HIT. "Beacon communities" with already high rates of HIT adoption were given additional funding to demonstrate how HIT can be leveraged to improve quality, cost-efficiency, and population health. Finally, support is being provided for the development and use of clinical registries and associated health outcomes research networks.4

3.5.4 Asian Countries

In Nepal, during the fiscal year 1993/94 the ministry of health was restructured and department of health was reinstated. A central Health Management Information System (HMIS) Section was established in order to develop integrated health management information system at all levels for better co-coordination, planning, monitoring and evaluation of the ongoing program in an

integrated manner at various management levels. Now, Health Management Information System (HMIS) includes data collection, compilation, processing, dissemination, analysis & interpretation.

The objectives of HMIS are as follows:

- To monitor the achievement, coverage, continuity and quality of health services.
- To help assessing progress (evaluation) towards goals and targets of district health programmers.
- To support the planning activities of all health programs. To help senior managers to develop appropriate health policy guidelines.
- To provide access of data/information to MoHP, all departments, divisions and centers on time.
- To support the planning, monitoring and evaluation (PME) management cycle of all health programmers.⁴⁰

In Japan, The New Strategy in Information and Communications Technology (IT), released in 2010, outlines the following four goals regarding the health sector: 1) to develop patient electronic medical records that can be accessed by all providers; 2) to develop health information technology and telehealth platforms that help link patients with doctors and nurses in underserved areas; 3) to create a platform that can monitor pharmaceutical prescriptions and adverse events in real time, in order to improve patient safety and monitoring; and 4) to create a claims database of all conditions and interventions to facilitate assessment of community needs and development of interventions. In spite of a number of initiatives over the past decade. electronic health records have not widely been used. Electronic health record networks have developed only as experiments in selected areas. Unique patient identifiers and standards for information exchange have been discussed, but are yet to be established. Interoperability between providers has been established in the selected areas mentioned above but not in general. Consequently, a patient can make appointments online in some clinics and hospitals but not in others. Currently, experiments are being carried out to make personal health information available to patients and providers via cloud computing. The government has made electronic billing obligatory in the public health insurance system for all providers except those without the necessary staffing and instruments. In 2011, almost all hospitals used electronic billing, compared with 80 percent of medical clinics and more than 30 percent of dental clinics.4

An electronic health information system called the Community Health Information Tracking System (CHITS) in health centers is implemented in the Philippines. CHITS was created in 2005 to respond to a gap in population health decision-making that developed when the Philippines government underwent health sector reforms in the 1990s, shifting resources and decision-making authority from the national Department of Health to local governmental units at the municipal, provincial and regional levels. Two models - Prochaska and Velicer's Transtheoretical Model for Health Behaviour Change and Greenwood and Hining's Organizational Change Management Model - were used to examine the transition from a paper to electronic environment and to assess processes and outcomes at the individual and organizational levels. Final results show both models adequately described the change management processes that occurred for health center workers and health centers during implementation. However, neither model was developed to focus well on system and

government level action and inaction. Our use of these frameworks was therefore unable to fully encapsulate the multiple organizational and political layers of change required in a highly decentralized environment; the health center as an organizational entity was, and remains, highly dependent on decisions made by local governmental units – decision and policy-makers at this level must undergo their own change management processes in order for the adoption of CHITS to proceed. We therefore see a series of processes required to proceed both concurrently and sequentially in order for change to occur and be sustained individually, organizationally and systemically. In particular, the role and power of government policy and decision-making requires more deliberate attention when building our models and conducting our empirical enquiries.⁴¹

3.5.5 African Countries

Taking full advantage of lessons learned by pioneers around the world and others who had recent experience of HMIS reform, Malawi conceptualized, designed and implemented a simple, decentralized, action-oriented HMIS. Though the achievements made in 4 years are quite remarkable, the main aim of optimizing data quality and use have not yet been fully achieved. The support for further strengthening must be continued until a culture of information is created in the entire health sector. The HMIS is designed to support individual patient care, health unit management and health system management functions. The practice of operating the new HMIS has resulted in improvements in knowledge about the current health and management situation and use of such knowledge in routine management decisions.⁴²

Problems with data quality undermine planning and assessment activities within the health system in Nigeria. HPI consultants introduced open source district health information system software in five states. This software was developed by HPI's partner HISP in South Africa and is used extensively across low-income countries. The introduction process involved: standardizing indicator-based minimum datasets; ratifying facility lists; developing data collection tools; building the capacity of HMIS staff; and data capture. Support is currently being provided for improving the quality of HMIS data; analyzing what is in the system; and using the information for planning purposes. All five states have shown significant improvement in data capture, analysis and use.⁴³

Zambia is placing significant emphasis on improving its health systems and reducing poverty. The country's Poverty Reduction Strategy Paper (PRSP) emphasizes health and has a number of indicators to monitor the health sector in line with the National Health Strategic Plan 2006–2011. The European Union provides substantial funds to Zambia under the Poverty Reduction Budget Support (PRBS) scheme.

To further support the objective of improving the efficiency and effectiveness of health care delivery, HPI was contracted to help Zambia's Ministry of Health (MOH) set up a modern, integrated HMIS database that was flexible, user-friendly and able to handle all necessary data sources. The resultant system combines information on people, equipment and procedures, organized to provide stakeholders with the tools to make timely and informed decisions and use information productively at various levels.

For this project HPI is providing a number of inputs to the MOH. These have included a project coordinator, a procurement specialist who developed the technical specifications for the database, and a training specialist who trained and assisted in the development of pre-service and in-service training.

3.6 Public Private Partnership

The rising demand and increased costs for health service delivery are straining health delivery systems worldwide. Addressing these challenges is overwhelmingly an issue for governments, as most health delivery systems today remain within governmental control. In general, governments' first step is to consider how public hospitals, in particular, are funded and operated – since, in most countries, public hospitals and the respective ancillary services account for the largest percentage of overall healthcare spending. In addressing this issue, governments are increasingly considering various models of private sector participation – often referred to as Public-Private Partnerships (PPPs). Such arrangements increasingly offer a viable approach to controlling costs, improving service, and even increasing access.⁴⁴ While some forms of public-private partnerships are a feature of hospital construction and operation in all countries with mixed economies, there is increasing interest in a model in which a public authority contracts with a private company to design, build and operate an entire hospital.⁴⁵

3.6.1 European Countries

The United Kingdom is the acknowledged world-leader in healthcare PPPs, harnessing the best in public and private sector skills and innovation to provide outstanding healthcare facilities. The UK government has successfully implemented a range of PPP programs for acute, primary, community and mental health facilities with a high degree of engagement with clinicians and the public. The projects range from the massive St Bartholomew's and Royal London Hospitals project, which is the largest single PPP hospital contract in the UK at £1.1 billion to a residential care home costing £2.8m. The UK's integrated PPP offering means that it can act as a one-stop service on projects, providing everything required for a successful completion from strategic advice and project management to securing finance. Since 1991 the NHS, working with British advisors, has developed considerable expertise in managing the process of specifying, procuring, contracting and running a PPP project. This includes developing efficient procurement, with standard form contracts to minimize costs. At the same time, the UK private sector has gained a wealth of experience in bringing together consortia comprising architects, planners, engineers, building contractors, facilities managers, medical equippers and financiers. The UK offers a deep knowledge about how to put a deal together, to manage the tender process, to organize delivery of the new facilities during the build phase and to manage the service contract during the delivery phase. UK professionals excel in the complex working relationships that are common in PPP today. This promotes efficiencies, creativity and innovation not readily to be found in the more restricted practices in many other countries. The financial knowledge that UK consultants have developed offer a comprehensive understanding of the needs of the investment community, and the ability to interpret this within the local framework of the individual countries in which they work.⁴⁶

In Germany, the federal government as well as several of the Länder became interested in using public-private partnerships, in particular to deliver infrastructure services. In addition, several municipalities in Germany also use PPPs to deliver local government services; ten new projects with the value of EUR 500 million entered the market in 2005, with the total market estimated to be worth EUR 1 billion.⁴⁷

In 2001 the French government concluded a 62-year concession contract with ALIS (Autoroute de Liaison Seine-Sarthe) to design, build, finance and operate a 125 km motorway in the northwest of France at a total cost of EUR 900 million. The motorway opened in October 2005. In addition, the French government announced 35 PPP projects that include part of the TGV

Rhine-Rhone high-speed train line (train grande vitesse), the renovation of the zoo at Vincennes, and the rebuilding of the Maison d'arrêt de la Santé (Santé prison) in Paris. The French government also plans to use public-private partnerships to construct 18 prisons and for 30 schemes in healthcare.

In addition to transportation projects, Ireland has seen several water and waste projects. The Irish government also announced PPP deals in relation to prisons, courts, and the health and education sectors.

In Italy, PPP projects focus especially on transportation, but there are also projects regarding health, water and central accommodation.

In Denmark, Public-private partnership to develop a national e-Health portal to:

- Enable web access to Electronic Patient Records (EPR) via central document indices to data kept in the individual hospitals and General Practitioners' (GP) offices
- Provide a portal for electronic communication between citizens and healthcare professionals (e.g., e-referrals, e-prescription)
- Allow patients, their families, and healthcare professionals' access to up-to-date information⁴⁸

In Austria, An emergency hospital in Lower Austria on the verge of being closed down was transformed through a public-private partnership into a modern Holistic (Psychosomatic) Care Center Waldviertel (PSCW):

- 100-bed PSCW opened on July 1, 2006, after a thorough refurbishment, and will provide holistic care to the local and regional patients
- Objectives of the partnership were to renew a medical facility and introduce a new model of care in Austria building on international experiences

3.6.2 Americas

The United States of America health system is a public-private model in which government and private organizations both contribute to delivering the care that patients need and demand. As government's share of health spending increases, the need for effective partnerships with private payers and providers becomes more acute. In one context, these relationships could be viewed as public-private partnerships (PPPs). PPPs in the U.S. are most often associated with infrastructure projects in transportation and energy, but this model is evolving to healthcare delivery as federal and state governments look to private partners to bring capital and expertise. Throughout the globe, PPPs are being crafted to make government and private industry more accountable for healthcare delivery and financing. This report tracks the evolution of the PPP models and explores how the capital and operational structure provided by PPPs can be leveraged more broadly to address government demands for greater efficiency in health spending.⁴⁹

In Canada, P3 is the name given to a method of privatizing health services and facilities. It stands for public-private partnership. In a typical P3 deal, the government allows for-profit private corporations to finance, design, build and operate health facilities. The government commits to lease the facility and use certain services for a period of as much as 30 years or more. Some provinces enter into P3 arrangements to build needed hospitals, promising that the P3s will save money and be more efficient. The reality is very different. P3s cost more to build

and operate, take private profits from the public health budget, hide their costs and erode the quality of services.

Every P3 hospital project in Ontario has experienced huge cost overruns. The North Bay P3 was estimated to cost \$551 million, but actual costs came in at \$1 billion. The Sarnia P3 was more than double its estimate of \$140 million, coming in at \$320 million. The Brampton, Ontario P3 hospital is estimated to cost the public an additional \$600 million over the life of the project. If the Brampton experience is repeated in the 12 P3s now underway or planned in Ontario, the public will pay an additional \$7.2 billon. The Royal Ottawa Mental Health (ROMH) Centre was promised to cost \$100 million but really cost \$146 million. So far, costs for the four P3s – Sarnia, Brampton, Ottawa and North Bay - are \$2.1 billion, instead of the estimated \$1.2 billion. That's an overrun of 75%.

P3 hospitals are jointly managed by the Hospital Board and the P3 Corporation. The corporation's mandate is to achieve profit for investors. If quality problems come up, the public board has to follow a legal process set out in the P3 contract to resolve the issue. The costs of these legal proceedings come out of the hospital budget, and ultimately out of patient care.⁵⁰

Brazil's first public-private partnership (PPP) in health will dramatically improve emergency hospital services for one million people in Salvador, the capital of the state of Bahia. Located in one of the most underserved districts, the Hospital do Subúrbio is the first state hospital construction in the Salvador metropolitan area in 20 years. The transaction closed on May 28, 2010 and construction was completed in July 2010. The 298-bed facility will provide traditional emergency care as well as specialized treatment for trauma, orthopedic and cardiac emergencies, and other complex injuries. The hospital will include a surgical center, a clinic, medical laboratories, a physical therapy unit, a hemodynamics unit, and a pharmacy.⁵¹

Outdated hospital facilities meant long lines and substandard care for the citizens of Toluca and Tlalnepantla, two densely populated areas in Mexico. Private sector best practices and investment were needed to improve health services to patients and users. To achieve this, the government hired IFC as lead advisor to the state's Social Security Institute, a health insurer, for an innovative public-private partnership for two new 120-bed hospitals. The new hospitals will replace outdated facilities and provide patients with improved services while creating a business model for optimal health care in the state. Hospital operations are expected to be complete by June 2012 and the two hospitals combined will serve a population of about one million. 52

Public–private partnerships may be more effective than separate public- and private-sector programs and services, but expected results depend on the type of PPP. Evidence points to the potential of public–private partnerships to achieve measurable improvements in strengthening health systems. Contracting out increases the use of health services. In Bolivia, El Alto Municipality contracted out the management of a hospital to a nongovernmental organization (NGO) and later transferred the management of all district facilities to the NGO. The Ministry of Health reported a 21 percent increase in the number of deliveries attended by health personnel.⁵³ PROSALUD/Bolivia is working to integrate public and private health services, including FP/RH, to reach low- and middle-income populations in urban and peri-urban areas.⁵⁴

3.6.3 African Countries

In Zimbabwe Private Health Institutions and Companies can be incorporated in Public Private Partnerships in order to provide Universal Access in a holistic manner. Due to the operating environment partnership arrangements at local levels seem to work better where private

institutions extend their services to surrounding communities. The private sector in Zimbabwe has potential to contribute meaningfully to the process of achieving national health objectives. Though cooperation between the private and public sectors has existed for a long time, this has been ad-hoc and informal. This potential needs to be tapped and coordinated. Opportunities exist in increasing the capacity of local manufacturers to produce essential supplies for the health sector (e.g. drugs, equipment and sundries). The workplace is one of the effective points for provision of health services by the private sector. Zimbabwe experienced severe and escalating economic challenges, which picked in 2008. The economic decline resulted in a sharp decrease in funding for social services in real terms. This directly contributed to an unprecedented deterioration of health infrastructure, loss of experienced health professionals, drug shortages and a drastic decline in the quality of health services available for the population. Zimbabwe has been experiencing a significant brain drain of doctors and nurses with two dimensions. First, within the country, health professionals have been moving from the public to the private sector. Second, there has been an accelerating movement of professionals out of the country primarily to the United Kingdom, South Africa and Botswana. Some professionals use the private sector as a stepping stone between the public sector and leaving the country. Public health workers are kept at work through the Human Resources for Health Retention Scheme (HHRS) by providing temporary allowances. 55

Egypt, the most populous country in the Arab world, has a well-respected system of medical education, but has difficulty delivering high-quality medical care because of inadequate hospital facilities. To tackle the problem, the government of Egypt sought IFC's assistance in the country's first public-private partnerships in the health sector to design, build and operate two new specialty teaching hospitals. These will be located at Alexandria University, a leader among Egypt's educational and healthcare institutions. The concessions were signed on April 30, 2012, and are expected to be ready to receive patients in 2014. An international consortium led by Bareeq Capital, an Egyptian private equity firm focusing on social infrastructure projects, together with local and international partners, G4S, Siemens and Detac, won the 20-year concession contracts for two new hospitals in Alexandria, Egypt's second largest city. Smouha Maternity University Hospital is planned as a 200-bed gynecology and obstetrics center with a blood bank facility, while the Mowassat Specialized University Hospital will be a 224-bed facility providing neurosurgery, urology and nephrology services. Both hospitals will serve the current and future needs of the expected patient population, as well as provide a strong foundation for the clinical teaching component of Alexandria University.⁵⁶

In October 2008, Lesotho began replacing its main public hospital with a new 425-bed facility that is supported by a network of refurbished urban clinics. All the facilities were designed, built, financed, and operated under a public private partnership (PPP) arrangement that will also include clinical services. The new hospital will deliver greatly improved, high quality, publicly funded health care services and will serve as the main clinical training facility for all health professionals. The PPP project structure is a first for the health sector in Africa.⁵⁷

PPPs are not a new concept in Nigeria. Indeed, they are already practiced in different ways in every state. This policy therefore aims to build upon these current efforts, and to provide a framework for more sustained and effective action. This PPP policy affords all the tiers of government, interest groups, including other stakeholders to identify with any or all sections of the recommendations that are outlined in it. The challenge and/or expectation are to harness all the abundant health care resources for the benefit for the people of Nigeria. ⁵⁸

3.6.4 Asian Countries

In India, to help the state government improve access to and availability of advanced diagnostics services, IFC assisted the government of Andhra Pradesh in structuring a novel public-private partnership (PPP) model for upgrading radiology services at four teaching hospitals attached to public medical colleges in Kakinada, Kurnool, Vishakhapatnam, and Warangal. The project was completed in July 2010 and took only eight months.⁵⁹

Korea has recently accelerated its PPP initiatives. It has followed a similar path to other OECD countries, starting off with transportation infrastructure projects, after which there has been a gradual expansion into schools, hospitals, and public housing projects.⁶⁰

Singapore's experience exemplifies an evolving public private partnership in health care financing and provision. In the 1980s, the Singapore government reexamined from first principles the role of the state in health care financing and provision, and concluded that a British-style National Health Service was neither a viable nor a sustainable option. It decided that while the government would continue to subsidise health care (along with other important social areas like housing and education) to bring prices down to an affordable level, the people would have to share in the costs of the services they consume. The "3M" system — Medisave (1984), Medishield (1990) and Medifund (1993) — which forms the centrepiece of Singapore's health care financing system, was therefore premised on the philosophy of shared responsibility, and the economic principle that health care services should not be supplied freely on demand without reference to price. In persuading the people to accept this hard-nosed policy, the government reasoned that the question "who pays?" was not the right question to ask, for "whether it is the government, Medisave, employers, or insurance, it is ultimately Singaporeans themselves who must bear the burden" - since insurance premiums are ultimately paid by the people, employee medical benefits form part of wage costs, and taxes are paid by taxpayers. Over the years, the demand for health care has increased in tandem with the key drivers of health care costs, such as the rapid ageing of the population, advancing medical technology resulting in the increased range and number of possible interventions, and rising public expectations. Singapore's innovative 3M system of health care financing has proven to be very effective in mobilizing private financial resources. Medisave, the state-run medical savings accounts, which is compulsory for the working population, today stands at a staggering S\$30 billion, an amount that can underwrite Singapore's total health care expenditure for the next 5 years. A most remarkable achievement has been the gradual shift of the financial burden from the government to the private sector. Since access to needed care is explicitly guaranteed for the poor, and the state-run Medishield insurance scheme protects against financial ruin from catastrophic illness, the system is on the whole no less humane than a state-funded one.⁶¹

The U.S. Trade and Development Agency (USTDA) and the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Commerce (Commerce) joined with China's Ministries of Health (MoH) and Commerce (MOFCOM) to announce their support for the establishment a new public-private partnership in the healthcare sector. Initially, twelve U.S. companies and six supporting organizations will participate in this partnership, alongside the supporting U.S. and Chinese Government agencies. The partnership will be organized around U.S. healthcare industry strengths and government capabilities in order to foster long-term cooperation with China in the areas of research, training, regulation and the adoption of an environment that will increase accessibility to healthcare services in China. Participating U.S. companies initially include 3M, Abbott, Chindex, Cisco, General Electric, IBM, Intel, Johnson &

Johnson, Medtronic, Microsoft, Motorola, and Pfizer. Supporting organizations include AdvaMed, the Alliance for Healthcare Competitiveness, the American Chamber of Commerce in China, and the American Chamber of Commerce in Shanghai, PhRMA and the U.S.-China Business Council. Over time, the partnership will enhance cooperation in areas such as rural healthcare, emergency response, personnel training, medical information technology, and management systems; while also exploring ways to support other fields such as integrative and traditional Chinese medicine. These programs will enhance both sides knowledge of best practices, management, technological developments, and other healthcare-related topics. United States and China Launch Public Private Partnership on Healthcare-Increasing collaboration in the healthcare sector

3.6.5 Australia

Globally PPPs in health are evolving from infrastructure and facilities management services to a broader range of services. Australia is following the pattern with the proposed Sydney Northern Beaches hospital and the Fiona Stanley hospital in Western Australia where the private contractor will provide the range of facilities management, support services and non-clinical services. Currently Australian healthcare commissions for the provision of services not directly for outcomes. As PPPs become increasingly sophisticated we expect that clinical service contracts will move from a specification about levels of activity, to providers being paid on a capitation fee and based on health outcomes. Essentially, healthcare will move from a contractual system to a partnership arrangement focused on the delivery of outcomes.⁶²

4.0 Conclusion and Recommendations

It is seen globally that in order to ensure quality healthcare, governments should respond by amending and revising their healthcare regulations periodically in accordance with the changing times and health situations. After thorough review of legislations governing the health sector of KP and their comparison with global best practices, the need of the hour is to come up with new and improved health reforms, not only in legislation but also particularly in implementation arrangements. This is specifically pertinent considering poorly managed and implemented laws are resulting in legislative frameworks ending up only on constitutional papers. Thus, efficient, practical and accountable implementing systems are required in the province to achieve any impact on health system performance improvement.

Gaps and weaknesses in the reviewed legislation entail (a) dearth of laws on patient rights, public-private partnerships, accountability, information systems and their use; (b) non-existence of a centralized and unified system in place for ensuring standardized healthcare and (c) limited focus on implementation arrangements of laws especially pertaining to autonomous institutions, licensing, regulation and accreditation of health facilities and medical institutes. The effect of these gaps is evident in health system performance and sector indicators where the system remains to be captive to poor healthcare quality and non-standardized health facilities.

4.1 Recommendations

In addressing this weakness, it is pertinent that government in collaboration with all the relevant stakeholders, focus more on practical and achievable legislations, ultimately leading to implementation frameworks concentrated on quality improvement through progress monitoring, performance assessment and accountability. In consultation with health sector stakeholders, specific recommendations, in accordance with Integrated Development Strategy 2014-18, for overcoming the gaps and weaknesses in the existing legislative frameworks governing the health sector of KP are as follows:

- 1. Revision and enactment of laws regarding Health Foundation, Autonomous Medical Institutions, and KP Healthcare Commission/Health Regulatory Authority
- 2. Adoption of primary and secondary healthcare standards, their reference manuals for regulation of private sector hospitals and healthcare facilities in line with the reformed legislative framework
- 3. Formulation of advocacy strategy to enable acceptance of reformed legislations regarding healthcare standardization among stakeholders within and outside the government
- 4. Development of frameworks for implementation of major initiatives of KP's health sector to achieve the expected outcomes regarding a) Public Private Partnerships, specifically in areas of human resource development; b) enabling adoption of Autonomous Health Institutions Act through support on subordinate rules and regulations; c) Management of Health Informations through Knowledge Management Unit.

Following may be the salient components of these implementation frameworks:

- Linkages with GoKP's policy principles and strategic directions
- Development of frameworks in line with local, regional, global best practices

 Description of strategic actions, activities, coordination and sustainability mechanisms, and responsibility statement to support the government in effective implementation of these frameworks

5.0 Appendices

Appendix -1 List of Documents

Sr. No.	Documents					
	Policy and Strategy Documents:					
1.	National Health Policy 2001					
2.	Draft National Health Policy 2009					
3.	KP Health Sector Strategy 2010-17					
4.	Rules of Business Govt. of NWFP 1985					
5.	KP Health (Management) Service Rules 2008					
6.	KP Appointment, Deputation, Posting and Transfer of Doctors Regulatory Act 2011					
7.	Teaching Cadre Rules 2007					
8.	NWFP Procurement Goods, Works and Services Rules 2003					
9.	KP Medical & Health Institutions and Regulations of Healthcare Services Ordinance 2002					
10.	KP Medical & Health Institutions and Regulation of Healthcare Services Amendment Act 2006					
	Punjab Healthcare Commission Act, 2010					
11.	NWFP Private Medical Institutions Ordinance 1984					
12.	NWFP Private Medical Institutions Amendment Ordinance 1985					
13.	NWFP Private Medical Institutions (Registration) Rules, 1984					
14.	Medical Attendance Rules 1990					
15.	The Public Health (Emergency provisions) Ordinance, 1944					
16.	Care Quality Commission (Registration) Regulations, 2009					
17.	The New NHS Provider license 2013 – Monitor's response to the statutory consultation on the new NHS provider license					
16.	Tenth Five Year Plan 2010-2015					
17.	Annual Development Program of KP 2013-14					
18.	Development Statistics of KP 2014					

Sr. No.	Documents					
19.	Primary Care Standards KP					
20.	Secondary Care Standards KP					
21.	Essential Drugs List of KP for Primary and Secondary Healthcare Facilities					
20.	Amended Ordinance HRA 2002					
21.	KP Health Regulatory Authority Rules					
22.	The Public Health Ordinance 1944					
22.	MNCH Program KP					
24.	National Program for Family planning and Primary healthcare KP					
25.	EPI Program KP					
26.	TB Control Program KP					
27.	Hepatitis Control Program KP					
28.	Rollback Malaria Program KP					
29.	Assessment of procurement system and capacity of DoH KP					
30.	KP Health Sector Situation Analysis					
31.	Improving Public Health Delivery in Punjab, Pakistan: Journal of Health Sep 2013					

6.0 References

¹ Government of Khyber Pakhtunkhwa. Integrated Development Strategy 2014-18, 2014.

² National Institute Of Population Studies. Pakistan Demographic And Health Survey, 2012-13.

³ Department Of Health, Government Of Khyber Pakhtunkhwa. Health Sector Situation Analysis, 2012.

⁴ The Common Wealth Fund. International Profiles Of Health Care Systems, Publication No. 1717, 2013.

⁵ Ibid.

⁶ European Observatory on Health Systems and Policies. Health Systems In Transition: Ireland Health System Review, 2009; 11(4).

⁷ European Observatory on Health Systems and Policies. Health Systems In Transition: Sweden Health System Review, 2012; 14(5).

⁸ European Observatory on Health Systems and Policies. Health Systems In Transition: Canada Health System Review, 2013; 15(1).

⁹ European Observatory on Health Systems and Policies. Health Systems In Transition: United States of America Health System Review, 2013; 15(3).

¹⁰ Latin America and Caribbean Health Sector Reform Initiative. Applied Research On Decentralization Of Health Systems In Latin America: Bolivia Case Study, 2000.

¹¹ World Health Organization. Health In The Americas, 2012.

¹² Ibid

¹³ European Observatory on Health Systems and Policies. Health Systems In Transition Summary: Australia, 2002.

¹⁴ Albin B, Hjelm K, Zhang WC. Health Care Systems In Sweden And China: Legal And Formal Organisational Aspects. Health Research Policy and Systems, 2010; 8:20.

¹⁵ Ministry of Health and Population Nepal, GTZ. The Current Legal Framework On Health Care Financing And Social Health Protection In Nepal, 2009.

¹⁶ Swedish Agency for Growth Policy Analysis. India's Healthcare System: Overview And Quality Improvements, 2013.

¹⁷ Ministry of Health, Government of Uganda. National Health Policy: Reducing Poverty Through Promoting People's Health, 2009.

¹⁸ Ministry of Health and Child Welfare, Zimbabwe. The National Health Strategy (2009 - 2013), 2009.

- Health Care In South Africa. Available at http://www.Southafrica.Info/About/Health/Health.Htm#.U9oogfmsyhs (Accessed on 26 July 2014).
- ²⁰ Chawla M, Govindraj R, Berman P, Needleman J. Improving Hospital Performance Through Policies To Increase Hospital Autonomy: Methodological Guidelines. Data for Decision Making Project, Harvard School of Public Health, 1996.
- ²¹ European Observatory on Health Systems and Policies. Europealth, 2013; 19(1).
- ²² London School of Economics. Health Care Management Autonomy: Evidence From The Catalonian Hospital Sector In A Decentralised Spain.
- ²³ DFID. Health Sector Reform: Improving Hospital Efficiency, DFID Health Systems Resource Centre, 1998.
- ²⁴ Centre for Economic Performance, London School of Economics. Management In Healthcare: Why Good Practice Really Matters.
- ²⁵ Latin America and Caribbean Health Sector Reform Initiative. Applied Research On Decentralization Of Health Systems In Latin America: Bolivia Case Study, 2000.
- ²⁶ Mendez CA, Torres A MC. Hospital Management Autonomy In Chile: The Challenges For Human Resources In Health. Saúde Pública, 2010; 44(2)
- ²⁷ Autonomous Healthcare In The Zapatista Communities: "You Can't Think About Health And Not Think About The River", 2010
- ²⁸ World Bank. Fixing The Public Hospital System In China. China Health Policy Notes No. 2, 2010.
- ²⁹ Ministry of Health, Government of Nepal. Nepal Health Sector Programme Implementation Plan. 2004-2009.
- ³⁰ National Health Foundation of Thailand. Potential Implications Of Hospital Autonomy On Human Resources Management. A Thai Case Study. Roundtable Discussion.
- ³¹ Collins D, Njeru G, Meme j. Hospital Autonomy In Kenya: The Experience Of Kenyatta National Hospital. Data for Decision Making Project, 1996.
- ³² Needleman J, Chawla M, Mudyarabikwa O. Hospital Autonomy In Zimbabwe. Data for Decision Making Project, 1996
- ³³ Evelyn A. Autonomy Of Apex Hospitals In Uganda: Too Little, Too Slow. Health Policy And Development, 2004; 2(2): 151-160.
- ³⁴ The Common Wealth Fund. International Profiles Of Health Care Systems, Publication No. 1717, 2013
- ³⁵ National Health Service, UK. The Health And Social Care Information Centre (Establishment Of Information Systems For Nhs Services: Collection And Analysis Of Primary Care Data), 2013.

³⁶ The Common Wealth Fund. International Profiles Of Health Care Systems, Publication No. 1717, 2013.

- ³⁸ World Health Organization. Health In The Americas, 2012.
- ³⁹ Lau F, Kuziemsky C, Price M, Gardner J. A Review On Systematic Reviews Of Health Information System Studies. Journal of American Medical Association, 2010; 17: 637-645.
- ⁴⁰ Asian Institute of Technology, Thailand. Administrative Data System Of Ministry Of Health And Population In Nepal. Regional Workshop Report, 2007.
- ⁴¹ Shainur P, Casebeer A, Scott R. Implementing Electronic Health Information Systems In Local Community Settings: Examining Individual And Organisational Change Experiences In The Philippines" The Electronic Journal Information Systems Evaluation, 2012; 15(2): 186-197.
- ⁴²Chaulagai CN, et al. Design And Implementation Of A Health Management Information System In Malawi: Issues, Innovations And Results. Health Policy, 2005, 375-384.
- ⁴³ Health Partners International. Strengthening Health Information Systems. Available at www.healthpartners-int.co.uk (Accessed on 22 July, 2014).
- ⁴⁴ Global Health Group, UCSF. Public-Private Investment Partnerships In Health Systems Strengthening. Background Paper, 2008.
- ⁴⁵ McKee M, Edwards N, Atun R. Public–Private Partnerships For Hospitals. Bulletin Of The World Health Organization, 2006; 84:890-896.
- ⁴⁶ National Health Service, UK. Public Private Partnerships. Healthcare UK, 2013.
- ⁴⁷ Espigares JLN, Torres EH. Public-Private Partnership As A New Way To Deliver Healthcare Services. University of Granada.
- ⁴⁸ Nikolic IA, Maikisch H. Public-Private Partnerships And Collaboration In The Health Sector: An Overview With Case Studies From Recent European Experience. HNP Discussion Paper, 2006.
- ⁴⁹ Princewaterhouse Coopers. Build and Beyond: The (r)evolution of healthcare PPPs, 2011.
- Medicare, Canada. Privatized, For-Profit Health Care. You'll Pay More and Get Less. Available at http://medicare.ca/wp-content/uploads/2009/05/factsheet4-2009.pdf (Accessed on 23 July 2014).
- ⁵¹ International Finance Corporation, World Bank Group. Success Stories Public-Private Partnerships: Brazil: Hospital do Subúrbio, 2013.
- ⁵² International Finance Corporation, World Bank Group. Success Stories Public-Private Partnerships: Mexico: Toluca and Tlalnepantla Hospitals, 2013.
- ⁵³ Family Health International. The Art And Science Of Health Systems Strengthening: The Role of Public–Private Partnerships in Strengthening Health Systems, 2012.

³⁷ Ibid.

- ⁵⁴ Management Sciences for Health, Inc. The PROSALUD Model for Expanding Access to Health Services, 2000.
- ⁵⁵ GIZ. Zimbabwe-Private Sector Engagement in Health and Social Protection, 2012.
- ⁵⁶ International Finance Corporation, World Bank Group. Public-Private Partnership Stories, Egypt: Alexandria University Hospitals, 2012.
- ⁵⁷ International Finance Corporation, World Bank Group. Public-Private Partnership Stories, Lesotho: National Referral Hospital, 2009.
- ⁵⁸ Ministry of Health, Government of Nigeria. National Policy on Public Private Partnership for Health in Nigeria, 2005.
- ⁵⁹ International Finance Corporation, World Bank Group. Public-Private Partnership Stories, India: Andhra Pradesh Radiology, 2011.
- ⁶⁰ Espigares JLN, Torres EH. Public-Private Partnership As A New Way To Deliver Healthcare Services. University of Granada.
- ⁶¹ Lim MK. Transforming Singapore Health Care: Public-Private Partnership. Ann Acad Med Singapore, 2005; 34:461-7.
- ⁶² European Observatory on Health Systems and Policies. The Growing Role of PPPs in Australia's Healthcare System, 2012

